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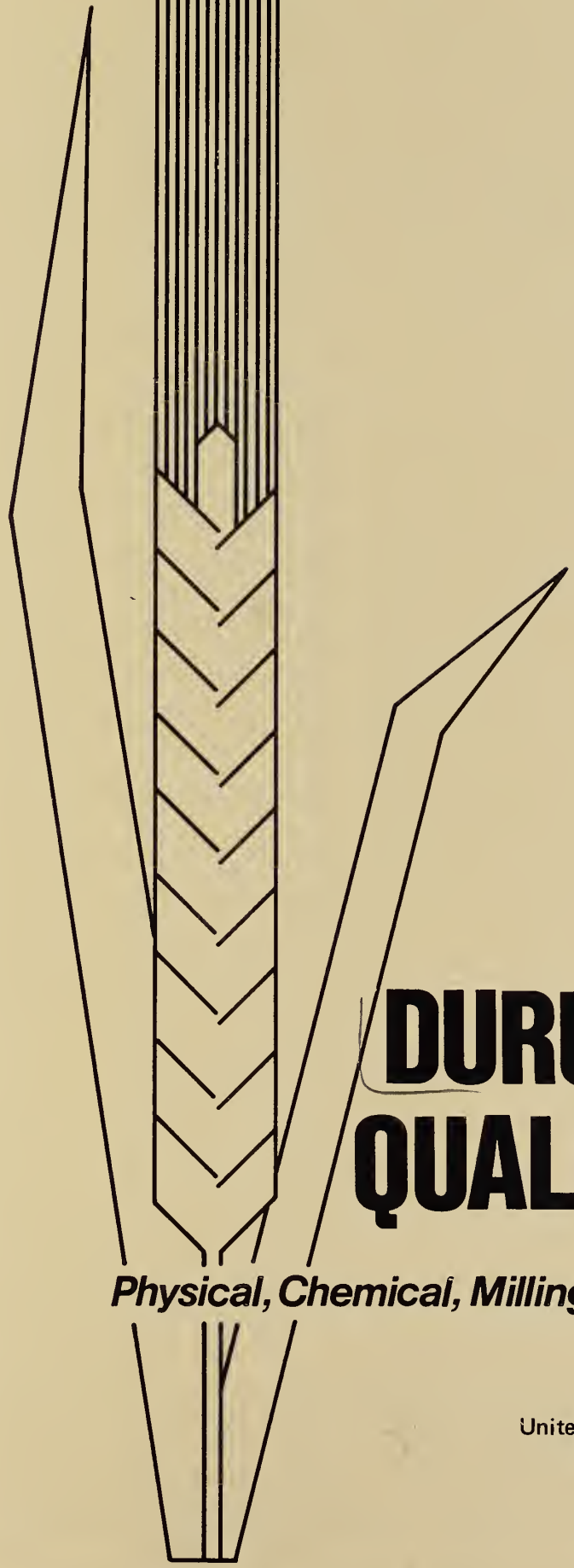
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**1986 CROP**



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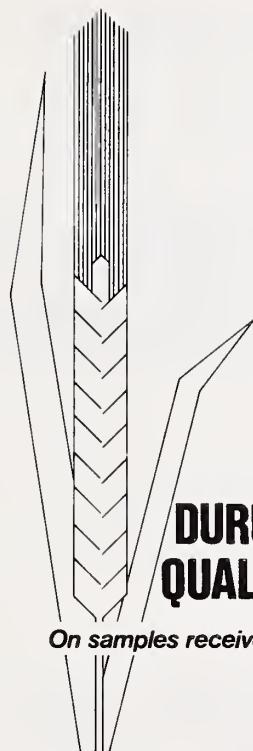
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# **DURUM WHEAT QUALITY REPORT**

*Physical, Chemical, Milling, and Spaghetti Characteristics*

United States Department of Agriculture  
Agricultural Research Service  
North Central Region





## **DURUM WHEAT QUALITY REPORT**

*On samples received from the 1986 crop*

Source:

Spring and Durum Wheat Quality Laboratory  
USDA, Agricultural Research Service  
Harris Hall, N.D.S.U.  
Fargo, North Dakota 58105



UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH SERVICE  
in cooperation with  
STATE AGRICULTURAL EXPERIMENT STATIONS

<sup>0</sup> QUALITY EVALUATION OF DURUM WHEAT VARIETIES

1986 CROP1/

by

R. D. Crawford, A. A. Ottenbacher, M. A. Dregseth,  
Technicians, J. E. Wohlman, Secretary, Agricultural Research  
Service; 2/ L. L. Nolte and M. Skunberg, Technicians, NDSU;  
3/ Wallace H. Kunerth, Research Chemist and V. L. Youngs,  
Research Food Technologist.2/

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1/ This is a progress report of cooperative investigations containing some results that have not been sufficiently confirmed to justify general release; interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and to those persons having direct and special interest in the development of agricultural research programs.

This report was compiled by the Agricultural Research Service, U. S. Department of Agriculture. Special acknowledgment is made to the North Dakota State University for their facilities and services provided in support of these studies. The report is not intended for publication and should not be referred to in literature citations or quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved. Cooperators submitting samples for analysis have been given analytical data on their samples prior to release of this report.

2/ Hard Red Spring & Durum Wheat Quality Lab., NDSU.  
Youngs retired 10/3/86; Kunerth resigned 10/31/86;  
Crawford will retire 3/11/88.

3/ Dept. of Cereal Science & Food Technology, NDSU.

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## INTRODUCTION

The twenty-third Durum Wheat Quality Report contains data for the 1986 crop. Samples of standard varieties and new strains of durum wheat grown in cooperative experiments in the durum wheat regions of the United States<sup>4/</sup> were milled and evaluated by the Hard Red Spring and Durum Wheat Quality Laboratory in cooperation with the Department of Cereal Chemistry and Technology on the campus of North Dakota State University at Fargo, ND. Methods and techniques are described in detail in the text of the report.

All samples received that were large enough to mill on the Buhler experimental mill were processed into spaghetti using the macro spaghetti processing method as described on page 13. A five pound wheat sample is required for the above method. All other samples were milled using the micro procedure and were not processed into spaghetti. Those samples having acceptable kernel characteristics and dust color score, if possible, should be included for macro processing the following year.

The purpose of this report is to make available to cooperators the quality data on standard varieties and new selections of durum wheat from the 1986 crop.

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<sup>4/</sup> Cantrell, R.G. and Brosz, J. Wheat varieties grown in cooperative plot and nursery experiments in the spring wheat region in 1986. Department of Agronomy, North Dakota State University, Fargo, ND.

## SOURCE OF THE 1986 CROP SAMPLES

Tests were performed on seven hundred sixty-four samples from 17 stations and eight states (California, Arizona, Washington, Minnesota, Montana, South Dakota, North Dakota and Nebraska) for quality evaluation. However, data on 27 of these samples are not included in this report, because this information was of interest to plant breeders at specific experiment stations only. Data presented in this report are from the Field Plot Nursery, Uniform Regional Nursery, Western Durum Nursery, Preliminary Nursery and the Advanced Nursery samples.

### FIELD PLOTS - 12

Mesa - Arizona

### UNIFORM REGIONAL NURSERY - 244

Williston, Dickinson and Carrington - North Dakota  
Day County and Selby - South Dakota  
Bozeman and Sidney - Montana  
Crookston - Minnesota

### WESTERN DURUM NURSERY - 92

Tulelake - California  
Royal Slope and Walla Walla - Washington

### PRELIMINARY NURSERY - 129

Davis - California

### ADVANCED NURSERY - 260

Imperial Valley, Davis and Kings County - California

1986 UNIFORM REGIONAL DURUM NURSERY

LIST OF ENTRIES

Entry No.	Entry	Sel. or P.I. No.	Year Entered	Origin
1	Mindum	--	1929	Minnesota
2	Ward	D6674	1969	ND-USDA
3	Rugby	D6722	1970	ND-USDA
4	Vic	D74112	1976	ND-USDA
5	Lloyd	D771*	1978	ND-USDA
6	Medora	DT433	1980	AC, Winnipeg
7	Monroe	D793	1981	ND-USDA
8	Laker	C881-4*	1984	WPB
9	Sceptre	DT380	1985	Univ. Sask.
10	D7224/Vic	D79168*	1983	ND
11	D74111/Cd	D79209*	1983	ND
12	D75149/Vic	D8012	1984	ND
13	D75149/Vic	D8016	1984	ND
14	D73121/Vic	D8019	1984	ND
15	Cal/Ed	NHD81-466*	1984	NAPB
16	Ed/Ward	NHD81-485	1984	NAPB
17	Rlt/Vic	D8172	1985	ND
18	D7690/Vic	D8191	1985	ND
19	D7690/Vic	D8193	1985	ND
20	D7690/Vic	D8194	1985	ND
21	D783/Vic	D81151	1985	ND
22	D785/Vic	D81154	1985	ND
23	Lloyd/Cd	D81183*	1985	ND
24	D773/Vic	D8261*	1985	ND
25	D773/Vic	D8263*	1985	ND
26	D77200/Vic	D8269*	1986	ND
27	D77173/D772	D8279*	1986	ND
28	D773/Clt	D8291*	1986	ND
29	D7618/Cd	D82136*	1986	ND
30	--	FA883-323	1986	WPB

\* Semidwarf

WESTERN REGIONAL DURUM

LIST OF ENTRIES

Aldura	T8300140
Carc "S"	T8300147
Durox	T8300175
Irridur	T8300179
Laker	TL730471
Lloyd	UC 499
Modoc	UC 606
Signadur	UC 640
Turbo	UC 642
Vic 1A	UC 647
Vic 220	#5
Waid	#6
WPB 881	#14
YAV "S"	#15
Yavaros 79	#16
YGA "S"	#17
D79209	#18
HD 810466	#19
T8300136	#20
T8300138	

## METHODS

The methods used in the testing of the samples were essentially the same as given in the last report.

Briefly, the following methods and terminologies were applied:

Test Weight Per Bushel - The weight per Winchester bushel of dockage-free wheat.

Thousand Kernel Weight - The 1000 kernel weight was determined by counting the number of kernels in a 10 g sample of cleaned, picked wheat on a Seedburo seed counter<sup>5/</sup>.

Kernel Size - The percentage of the size of the kernels [large, medium, and small] was determined on a wheat sizer as described by Shuey<sup>6/</sup>.

The sieves of the sizer were clothed as follows:

Top Sieve - Tyler # 7 with 2.92 mm opening  
Middle Sieve - Tyler # 9 with 2.24 mm opening  
Bottom Sieve - Tyler #12 with 1.65 mm opening

Protein Content - Both the Kjeldahl procedure and the near infrared technique were used to determine protein content. Nitrogen values, as determined by the Kjeldahl procedure, were multiplied by 5.7 to calculate protein values.

Hardness Test - This year wheat hardness scores are re-reported on the samples. The procedure used requires grinding the wheat samples with a UDY grinder, and obtaining data from a Technicon 400 near infrared analyzer. Wavelengths used were 1680 nm and 2230 nm. This procedure was developed by Mr. Karl Norris, USDA, Beltsville through a co-operative research project in which this Laboratory also participated. This procedure is not official and may be replaced with another in the

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<sup>5/</sup> Mention of a trademark name or proprietary product does not constitute a guarantee or warranty of the product by the U. S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.

<sup>6/</sup> Shuey, William C. A wheat sizing technique for predicting flour milling yield. Cereal Sci. Today 5:71 (1960).



future. Durum wheat hardness scores for the 1986 crop ranged from a low of 78 to a high of 147 with an average of 112.5.

Milling - All samples were cleaned by passing the wheat through an Emerson kicker and dockage tester and through a modified Forster scourer Model 6. The clean, dry wheat from the larger 2 kg samples was tempered in three stages: first to 12.5% moisture at least 72 hours prior to the second stage which is to add an additional 2.0% for 18 hours to give a cumulative moisture of 14.5%, then a final temper of 3.0%, 45 minutes prior to milling. The smaller 200 gram samples were pretempered to 12.5% moisture for at least 72 hours. They were then tempered to 16.5% moisture and allowed to stand overnight prior to milling.

The large field plot, preliminary and advanced samples were milled on a Buhler experimental mill specially designed for milling durum wheat. The mill is equipped with corrugated rolls throughout, and the semolina purified on a Miag laboratory purifier. All of the stock is handled pneumatically. The mill flow is shown on page 10. The purified semolina is used in testing the quality of semolina. The semolina extraction was calculated on a total products basis. Prior to milling this year's samples, the Buhler mill and purifiers were adjusted to maximize semolina yield, yet keep the speck count to an acceptable level.

The small samples were milled according to the method of Vasiljevic et al 7/. The flow diagram of this system is shown on page 11. In addition to this method the "purified" semolina was rebolted on a strand sifter equipped with a #35 tyler sieve. The sample was sifted for 30 seconds. The throughs of the #35 wire were classified as rebolted semolina. This was the material tested. The overs of the #35 wire were classified as crude shorts, and the overs of the rotating #34 wire sieve were classified as bran.

Semolina Extraction - For both the macro and micro method of milling, the percent semolina extraction was calculated on a total product basis.

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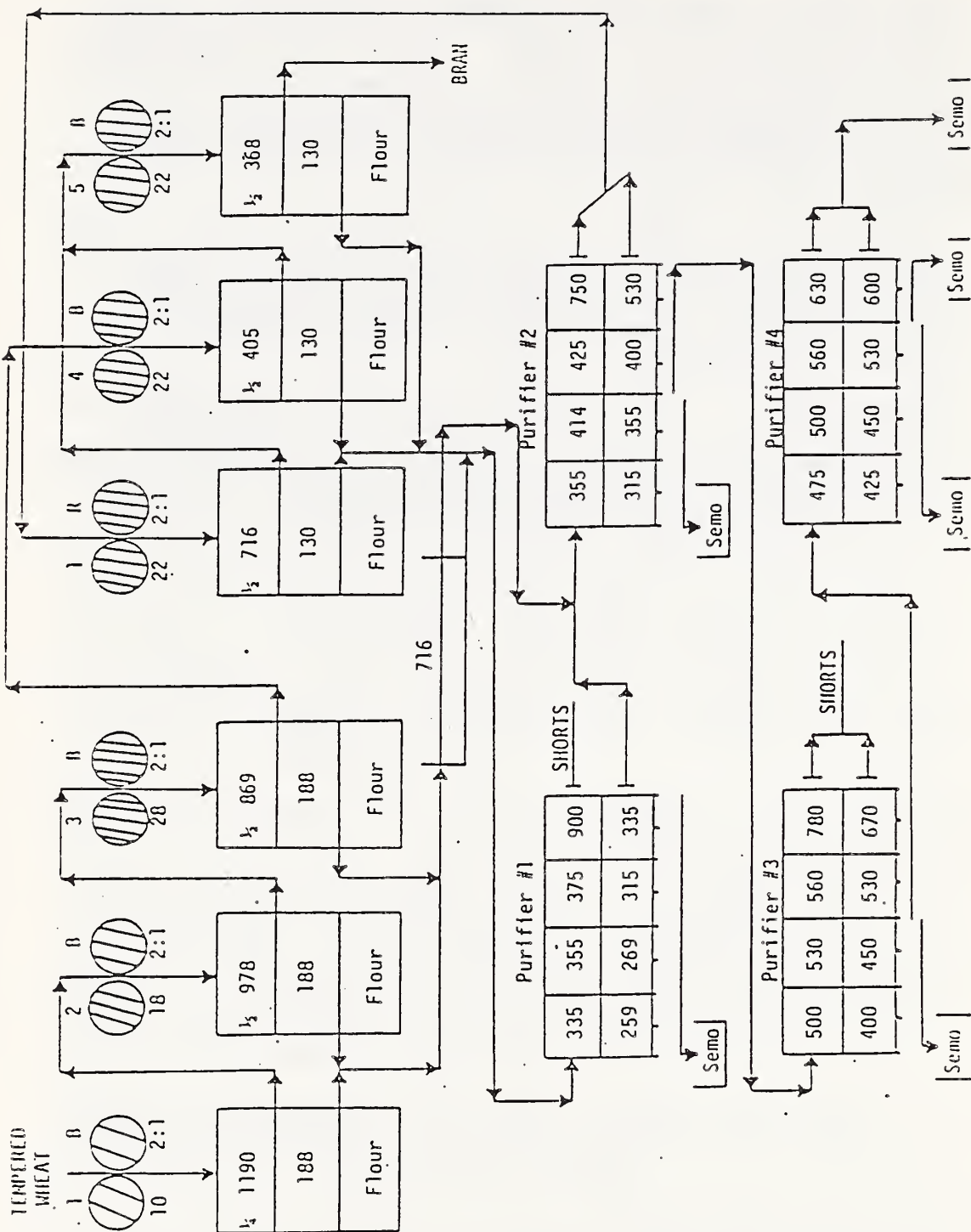
7/ Vasiljevic, S., Banasik, O.J. and Shuey, W.C. A micro unit for producing durum semolina. Cereal Chem. 54:397 (1977).

Speck Count - The number of specks in three different one-inch square areas of semolina enclosed by a special glass and frame were counted. Any materials other than pure endosperm chunks, such as bran particles, etc. were considered specks. The average of three readings was converted to the number of specks per 10 sq in (speck count). Speck count is done only on the macro milled samples.

Color Score - The color of the spaghetti or semolina has been generally accepted as the most important single grading factor. A deep amber or golden color is the most preferable. The amount of yellow pigmentation determines the color.

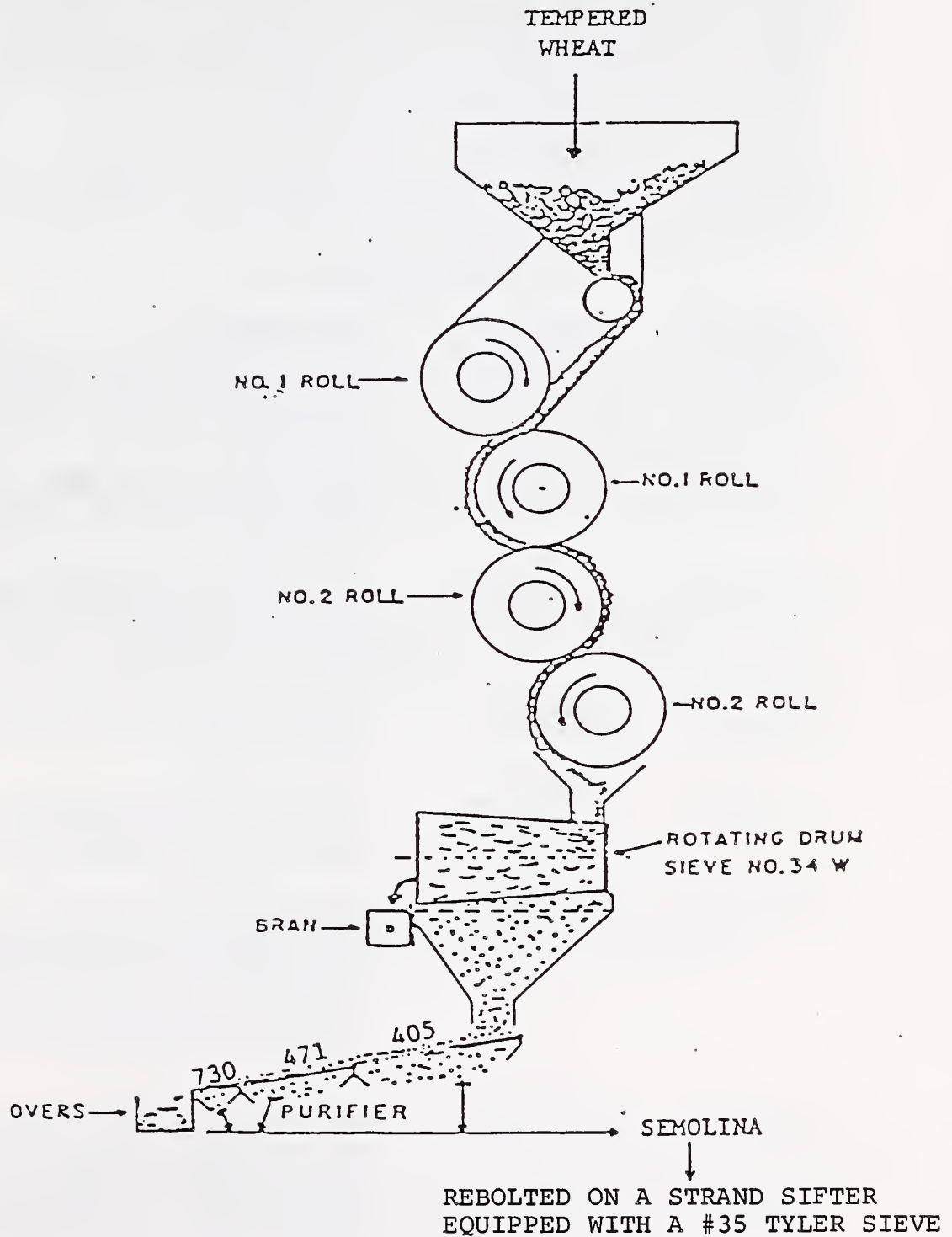
Cooked Weight - After cooking the 10 g of spaghetti for 12 minutes, the samples were washed thoroughly with distilled water and allowed to drain in a buchner funnel for 2 minutes. The sample was then weighed, and this weight is recorded as the cooked weight.

# FLOW DIAGRAM FOR LARGE DURUM WHEAT SAMPLES MACRO PROCEDURE





FLOW DIAGRAM FOR SMALL DURUM WHEAT SAMPLES  
MICRO PROCEDURE



Samples which have a color rating 1.5 point below the standard spaghetti score or 15 points below the standard semolina color score are unsatisfactory. It is possible that the average color score for a crop year may be higher or lower than average; therefore, this would be taken into consideration when giving the overall rating of a variety over a number of years.

The grading system shown below has been adopted for scoring the semolina color and spaghetti relative to the standard color score.

COLOR SCORE

<u>Semolina</u>	<u>Spaghetti</u>	<u>Description</u>
15 above	1.5 above	Much deeper and intense yellow pigmentation than standard
10 above	1.0 above	Deeper and more intense yellow pigmentation than standard
5 above	0.5 above	Slightly deeper and more intense yellow pigmentation than standard
Equal to Standard	Equal to Standard	Standard quality, depth and intensity of yellow pigmentation
5 below	0.5 below	Slightly less depth and intensity, but sufficient quantity of pigmentation
10 below	1.0 below	Slightly less quantity as well as depth and intensity of pigmentation than the standard, but still sufficient to be rated satisfactory on the basis of color
15 below	1.5 below	Sufficiently less quantity of yellow pigmentation than the standard to give a pale yellow color and graded unsatisfactory for color score.

Semolina Color Score - The semolina color score was determined by using Model D25M-9 Hunterlab tristimulus colorimeter equipped with an optical sensor and a signal processor. The instrument was calibrated using a yellow standard tile with Hunter L, a, b values of L = 77.33, a = -1.91, b = 20.94. A sample of semolina was placed in a cell normally used for near infrared analysis of flour in a Technicon 400 Infra Analyzer. This cell fits in the opening of the optical sensor. The b value was converted to a yellow color score ranging from 1-14, with 14 being a deep yellow and the most desirable color. In this report, the semolina color score, reported as "Du" in the tables, is multiplied by a factor of 10.

Spaghetti Color - The spaghetti color scores also were measured in the Model D25M-9 colorimeter. The specimen area (2 in diameter) was covered with straight spaghetti strands and readings were taken against a black background with 0% reflectance. Color difference values (L%, a% and b%) were measured for all the spaghetti samples by the method of Walsh, Gilles and Shuey<sup>8/</sup>. A uniform chromaticity chart was used for determining spaghetti color scores.

MACRO Spaghetti Processing - Spaghetti was processed on a semi-commercial scale pasta extruder (DEMACO). The control as well as all samples was processed with the following extruding conditions.

Temperature . . . . 49.5°C  
Rate . . . . . 12 rpm  
Absorption . . . . 32.5%  
Vacuum . . . . . 18 in Hg

These were the optimum conditions for processing spaghetti.

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<sup>8/</sup> Walsh, D. E., Gilles, K. A. and Shuey, W. C. Color determination of spaghetti by the tristimulus method. Cereal Chem. 46:7 (1969).

To process the spaghetti, a 1000 g batch was premixed by slowly adding the water and mixing at a slow speed for approximately 30 seconds and high speed for 10 seconds. Then the remainder of the water was added at slow speed in a Hobart C-100-T mixer equipped with a pastry knife agitator. After all of the water had been added, the semolina and water were blended at high speed for 30 seconds; the mixer was stopped to scrape down the sides of the bowl, and the blending continued for 90 seconds more to complete the premix stage. The premixed pasta was then transferred to the vacuum mixer of the press and extruded through an 84-strand 0.043 in teflon spaghetti die. A jacketed extension tube (9½" long x 1-3/4" inside diameter) was attached to the semi-commercial pasta extruder to allow more time for hydration of the semolina and minimize the number of white specks (unhydrated semolina) in the spaghetti. Extrusion temperature was controlled by a circulating water bath.

Spaghetti Drying - Spaghetti was dried in an experimental pasta dryer for an 18 hour cycle as described by Gilles, Sibbitt and Shuey<sup>9/</sup>. During the drying period, the humidity of the dryer was decreased linearly from 95 to 60% R.H. and the temperature was held constant at 40°C.

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<sup>9/</sup> Gilles, K. A., Sibbitt, L. D. and Shuey, W. C. Automatic laboratory dryer for macaroni products. Cereal Sci. Today 11:322 (1966).

## Cooking Characteristics of Spaghetti

### A. Cooking Procedure

Spaghetti (10 g) which had been broken into lengths of approximately 5 cm, was placed into 300 ml of boiling water in a 500 ml beaker. After 12 minutes cooking, the samples were washed thoroughly with distilled water in a Buchner funnel, allowed to drain for 2 minutes and then weighed to determine cooked weight. This procedure is the same as last year, but differs from previous years, when a 1% salt solution was used and the spaghetti was cooked for 10 minutes.

### B. Firmness Score

Two strands of cooked spaghetti were placed on a plexiglass plate and sheared at a 90° angle with a special plexiglass tooth. A continuous recording of distance versus force was made by the instrument during the operation. An automatic integrator was used to calculate the area under the curve (g cm) which was the amount of work required to shear the cooked spaghetti. To measure firmness, the average of three integrator scores was used, and the average work to shear was used as a measure of spaghetti firmness.

Calculations were as follows:

$$E = 0.0216 \times A \text{ (g cm)}$$

A = Average integrator reading

E = Area of curve expressed as g cm (work)

The higher the value, the firmer the spaghetti. A value of approximately 7.00 appears to be preferred.

### C. Residue

This is the weight of the solids remaining after the combined cooking and washing water was evaporated.



## DISCUSSION

The following discussion represents some of the basic techniques and criteria used in the milling and cooking quality evaluation of durum wheat samples. Several testing factors are used to determine the overall quality characteristics or final evaluation of a particular sample including, in general, the kernel characteristics, milling performance and cooking performance.

Each evaluation factor can be important. A sample could be of sufficiently poor quality for a given factor to eliminate it from possible future testing. However, a sample submitted for the first time and found to show little promise should be tested again to establish if it has some good promise, or no promise. A sample which is consistently rated as little promise or no promise should be discarded.

Data presented in this report were processed by using the Statistical Analysis System (SAS Institute, Inc., SAS Circle, Box 8000, Cary, NC 27511). The program developed from this system allows flexibility within the quality grading factors. This should allow us to relate more directly to industry and consumer requirements.<sup>10/</sup>

In this evaluation system 11 dependent variables are used. These are test weight, 1000 kernel weight, percent small kernels, wheat protein, total extraction, semolina extraction, dust color, speck count, semolina protein, spaghetti visual color score and spaghetti firmness score. Seven additional variables are measured and included in the tables for the reader's use and information but are not used in the computerized evaluation of the samples. These are percent large kernels, hardness, mixograph score, semolina mineral, falling number, cooked weight and cooking residue.

After computing an average of each of the 11 variables for the standards from a station or nursery, the computer subtracts established values from each of the standard averages to determine major (MJ) and minor (MI) faulting limits. There are two exceptions where precise values have been assigned, which are independent of the station standards. The first exception is wheat protein, where percentages below 11.5% will be classified as MJ faults, and percentages between 11.5% - 12.5% will be MI faults (14% m.b.). The second exception is semolina protein, where percentages below 11.0% are classified as MJ faults, and percentages between 11.0 and 11.5% are classified as MI faults (14% m.b.). Hence, the wheat and semolina protein faulting values remain the same for all stations and nurseries.

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<sup>10/</sup> Nolte, L.L., Youngs, V.L., Crawford, R.D. and Kunerth, W.H. 1985. Computer program evaluation of hard red spring wheat. Cereal Foods World 30:227-229.

### SELECTION OF STANDARDS

Whenever possible, the standards selected were named varieties grown at each location or in each nursery. In the tables of data, the varieties used as standards are identified by an "s" in the second column. At the bottom of each table are cited "average of standards". Quality deviation from these values determine the major and minor faults (note preceding paragraph). In nurseries where breeders did not grow named varieties, standard quality data were obtained from the 1986 North Dakota standard ('Vic'), which was processed separately with each nursery. This standard was grown in North Dakota, not at the particular nursery location. Other deviations are footnoted in the tables.

### HOW SAMPLES ARE SCORED

Each sample is assigned an evaluation score of 4. Major and minor faults determined from the data by the computer will reduce this score, depending upon the quality factor being faulted. The effects of the different quality faults are shown in the table which follows:

#### DURUM PROGRAM FAULTING AND SCORING VALUES

Variable	<u>Range<sup>a</sup></u>		<u>Effect on Evaluation Score<sup>b</sup></u>	
	Minor fault	Major fault	Minor fault	Major fault
Test Wt. (lb/bu)	-2.2	-3.1	-	-1
1000 KWT (g)	-2.1	-5.1	-	-1
Small Kernels (%)	+5	+10	-	-1
Wheat Prot. (%)	12.5	11.5	-1	-2
Tot. Ext. (%)	-2.5	-3.5	-1	-2
Semo. Ext. (%)	-3.0	-4.0	-1	-2
Dust color	-10	-15	-2	-3
Specks/10 sq. in.	+10	+15	-	-1
Semo. Prot. (%)	11.5	11.0	-1	-2
Visual Spag. color	-1.0	-1.5	-2	-3
Firmness (g cm)	-1.5	-2.25	-1	-2

<sup>a</sup> Wheat and semolina protein percents are fixed lower limits for faults. All other values represent the deviation from the average of the standards required to warrant a minor or major fault.

<sup>b</sup> These values are subtracted from a beginning score of 4.

## EXPERIMENTAL RESULTS - 1986 CROP

The results are tabulated and presented in the following order: Tables 1-8, Uniform Regional Nursery; Tables 9-11, Western Durum Nursery; Table 12, Field Plot Nursery; Tables 13-15, Preliminary Nursery; Tables 16-25, Advanced Nursery.

### UNIFORM REGIONAL NURSERY

Two hundred forty-four samples were received from eight stations and four states. Thirty samples were received from six stations, and thirty-two samples were received from two stations. Nine of these samples were named varieties from six stations and eleven named varieties were from two stations. The remainder were experimental lines. The word descriptions of these numerical scores are as follows: 1-1.4, no promise; 1.5-2.4, little promise; 2.5-3.4, some promise; 3.5-4.0, good promise. The discussion which follows is based on averaged data from the eight stations.

Crosby (4.0 - 1/0)11/ (3 years) - Good promise. This variety was grown in 1986 at two stations only - Day County and Selby, South Dakota.

Faults (1986 crop, SD stations only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

Edmore (4.0 - 0/0) - Good promise. This variety was grown in 1986 at two stations only - Day County and Selby, South Dakota.

Faults (1986 crop, SD stations only)

Kernel Characteristics - Satisfactory.

Milling Performance - Satisfactory

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11/ (Average General Evaluation - Number of Total Deficiencies/Major Deficiencies)



Laker (2.7 - 23/6) (3 years) - Some promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT.

Milling Performance - Semolina extraction, dust color.

Lloyd (3.4 - 22/8) (3 years) - Some promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT, small kernels.

Milling Performance - Semolina extraction.

Medora (4.0 - 2/0) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

Mindum (1.7 - 32/16) (3 years) - Little promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT, small kernels, wheat protein.

Milling Performance - Dust color.

Monroe (3.9 - 5/0) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - Satisfactory.

Milling Performance - Satisfactory.

Rugby (3.8 - 7/1) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

Sceptre (3.4 - 17/4) (2 years) - Some promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT.

Milling Performance - Semolina extraction, dust color.

Vic (3.9 - 2/1) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - Satisfactory.

Milling Performance - Satisfactory.

Ward (3.9 - 7/0) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Semolina extraction.

D8012 (3.9 - 6/0) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

D8016 (3.8 - 11/3) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT.

Milling Performance - Satisfactory.

D8019 (3.6 - 7/0) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

D8172 (3.7 - 10/1) (2 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Dust color.

D8191 (3.7 - 4/1) (2 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

D8193 (3.8 - 5/1) (2 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

D8194 (3.8 - 9/1) (2 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Semolina extraction.

D8261 (3.4 - 8/1) (1 year) - Some promise.

Faults (1986 crop)

Kernel Characteristics - Wheat protein, 1000 KWT, test weight.

Milling Performance - Semolina extraction, dust color.

D8263 (4.0 - 3/0) (1 year) - Good promise.

Faults (1986 crop)

Kernel Characteristics - Test weight, 1000 KWT.

Milling Performance - Satisfactory.

D8269 (3.9 - 6/0) (1 year) - Good promise.

Faults (1986 crop)

Kernel Characteristics - Test weight, wheat protein,  
1000 KWT.

Milling Performance - Satisfactory.

D8279 (3.8 - 4/0) (1 year) - Good promise.

Faults (1986 crop)

Kernel Characteristics - Test weight, 1000 KWT, wheat  
protein.

Milling Performance - Satisfactory.

D8291 (2.9 - 13/9) (1 year) - Some promise.

Faults (1986 crop)

Kernel Characteristics - Test weight, 1000 KWT, small  
kernels.

Milling Performance - Semolina extraction.

D79168 (3.5 - 12/5) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT, small kernels,  
wheat protein.

Milling Performance - Dust color.

D79209 (3.6 - 22/5) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Satisfactory.

D81151 (3.1 - 18/5) (2 years) - Some promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT.

Milling Performance - Semolina extraction, dust color.

D81154 (3.7 - 14/1) (2 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT.

Milling Performance - Semolina extraction.

D81183 (3.3 - 18/5) (2 years) - Some promise.

Faults (1986 crop only)

Kernel Characteristics - 1000 KWT, small kernels.

Milling Performance - Semolina extraction.

D82136 (2.0 - 16/8) (1 year) - Little promise.

Faults (1986 crop)

Kernel Characteristics - Test weight, 1000 KWT, small kernels.

Milling Performance - Semolina extraction, dust color.

FA883-323 (3.9 - 3/0) (1 year) - Good promise.

Faults (1986 crop)

Kernel Characteristics - 1000 KWT.

Milling Performance - Semolina extraction.

NHD81-466 (3.2 - 29/9) (3 years) - Some promise.

Faults (1986 crop only)

Kernel Characteristics - Test weight, 1000 KWT, small kernels.

Milling Performance - Semolina extraction.

NHD81-485 (3.7 - 7/2) (3 years) - Good promise.

Faults (1986 crop only)

Kernel Characteristics - Wheat protein, 1000 KWT.

Milling Performance - Semolina extraction.

WESTERN DURUM NURSERY

Tulelake, CA; Royal Slope and Walla Walla, WA - Tables 9-11

Ninety-two samples were received from three stations in two states. All analyses were done the same as for the Uniform Regional Nursery using our micro procedure. Aldura, Lloyd and Modoc were used as the standards. The average general score for Tulelake was 3.1. 1000 KWT and dust color were the two main areas for deficiencies. This data is in Table 9. The average general score for Royal Slope was 2.2 and for Walla Walla 3.1. Wheat protein was the major faulting area for both stations. This data is reported in Tables 10 and 11.

FIELD PLOT NURSERY

Mesa, Arizona - Table 12

Twelve samples were received from this station. All samples were milled, and the semolina was processed into spaghetti using our macro method. Aldura was used as the standard. Six samples showed good promise, 3 showed some promise and 3 showed no promise. The average general score was 3.0.



## PRELIMINARY NURSERY

One hundred twenty-nine samples were received from this station in three different series. Our 1986 standard was used as the standard for all three series. All samples were milled, and the semolina was processed into spaghetti using our macro method.

### 699 Series - Table 13

Fifty samples were received in this set. The major faulting areas were total extraction, semolina extraction, dust color and semolina specks. The average general score was 1.1.

### 6100 Series - Table 14

Forty-one samples were received in this set. The major faulting areas were total extraction, dust color and semolina protein. The average general score was 1.0.

### 6101 Series - Table 15

Thirty-eight samples were received in this set. The major faulting areas were total extraction, semolina extraction, dust color and semolina protein. The average general score was 1.0.



## ADVANCED NURSERY

A total of 260 samples were received from three stations in one state. All samples were milled, and the semolina was processed into spaghetti using our macro method.

### Imperial Valley, California - Table 16

Twenty-six samples were received from this station. Aldura, Mexicali and Westbred 881 were used as standards. The average general score for this station was 2.2.

### Imperial Valley, California - Table 17

Twenty-four samples were received in this set. Aldura, Mexicali 75 and Westbred 881 were used as the standards. The average general score for this set was 2.8.

### Imperial Valley, California - Table 18

Thirty-six samples were received in this set. Aldura, Mexicali and Westbred 881 were used as the standards. The average general score for this set was 2.3.

### Kings County, California - Table 19

Twenty-six samples were received from this station. Aldura, Mexicali and Westbred 881 were used as the standards. The average general score for this station was 2.3.

### Davis, California - Table 20

Twenty-six samples were received from this station using Aldura, Mexicali and Westbred 881 as the standards. The average general score for this station was 1.1.

### Davis, California, 620 Series - Table 21

Twenty selections were received in this set. Our 1986 standard was used as the standard for this set. The average general score for this series was 1.3.

### Davis, California, 621 Series - Table 22

Thirty-one selections were received in this set. Our 1986 standard was used as the standard for this set. The average general score for this series was 1.2.

Davis, California, 622 Series - Table 23

Twenty-eight selections were received in this set. Our 1986 standard was used as the standard for this set. The average general score for this series was 2.0.

Davis, California, 623 Series - Table 24

Twenty-seven selections were received in this set. Our 1986 standard was used as the standard for this set. The average general score for this series was 1.6.

Davis, California, 624 Series - Table 25

Six varieties and ten selections were received from this station. Our 1986 standard was used as the standard. The average general score was 1.3.

EXPLANATION OF ABBREVIATIONS  
LISTED UNDER THE HEADINGS AND UNDER  
MINOR AND MAJOR DEFICIENCIES ON TABLES

MINOR AND MAJOR DEFICIENCIES ON COMPUTER PRINTOUT

S or STD = Standard  
TW = Test Weight

1000 KWT or KW = 1000 Kernel Weight  
LG = % Large Kernels  
SM = % Small Kernels

WHT PRO or WP = Wheat Protein  
TOT EXT or TX = Total Extraction (Semolina Plus  
Flour)  
SEMO EXT or SX = Semolina Extraction  
DUS or DU = Semolina Dust Color Score (High  
score is more desirable)

MX = Mixograph Score (The higher the number, the  
stronger the curve)  
SPK or SK = Semolina Speck Count  
SEMO MIN = Semolina Mineral

FALL NO = Semolina Falling Number Value (Values  
above 300 are desired)  
SEMO PRO or SP = Semolina Protein

VI = Spaghetti Visual Color Score (The higher  
the score, the more desirable)  
FIRM or FR = Cooked Spaghetti Firmness Score  
(Approx. 6.50 to 8.50 is the  
desirable range)

RES = Residue in Water of Cooked Spaghetti  
VALU = Sample Evaluation Number (Example 4 =  
Good Promise)



TABLE 1

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=NORTH DAKOTA STATION=WILLISTON NURSERY=UNIFORM

VARIETY STD	TEST WT	1000 K.WT	LG SM	WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES				
										TW	KW	SM	WP	SX DU
LAKER	63.0	53.2	77	1	13.6	103	75	6	4					
LLOYD	63.4	45.5	56	1	13.8	100	90	4	4					
MEDORA	62.3	45.7	65	1	15.1	105	90	5	4					
MINNDUM	60.2	31.9	13	8	13.0	89	80	2	3	MI	MJ	MI		
MONROE	62.3	52.1	28	1	14.9	101	85	5	4					
RUGBY	63.0	44.6	64	1	15.1	99	80	6	4	MI				
SCEPTRE	61.8	42.0	57	2	14.3	97	85	7	4	MI				
VIC	62.8	49.3	76	0	15.1	101	85	5	4					
WARD	63.0	46.3	17	1	15.2	109	85	1	4					
D 8012	62.7	47.4	72	1	14.4	94	95	5	4					
D 8016	62.5	46.3	63	1	14.0	103	85	5	4					
D 8019	62.8	47.1	73	0	14.6	97	80	6	4					
D 8172	62.4	45.8	50	1	14.7	111	80	5	4					
D 8191	62.2	48.5	66	1	14.1	101	80	4	4					
D 8193	62.6	46.7	69	1	14.8	98	90	5	4					
D 8194	63.0	45.5	68	1	14.2	100	90	5	4					
D 8261	63.3	50.0	74	0	13.6	97	90	4	4					
D 8263	62.2	47.4	73	0	13.9	98	85	4	4					
D 8269	62.6	49.8	69	0	13.6	98	80	4	4					
D 8279	62.8	50.8	61	1	12.9	100	85	4	4					
D 8291	61.0	46.5	58	1	13.9	95	85	3	4					
D 79168	62.6	50.0	72	0	14.1	102	95	3	4					
D 79209	62.5	46.5	60	0	13.8	99	85	3	4					
D 81151	63.1	44.4	66	0	14.6	103	90	4	4	MI				
D 81154	63.0	45.2	66	1	14.8	99	90	4	4					
D 81183	62.9	45.5	53	1	13.3	97	90	4	4					
D 82136	63.1	46.3	68	1	14.2	104	70	3	1	MI	MI			
FA 883-323	62.5	48.3	69	2	14.0	103	85	3	4					
NHD 81-466	62.4	46.1	59	1	13.3	97	85	3	4					
NHD 81-485	63.2	48.8	73	0	14.4	101	90	4	4					

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 62.9 46.7 1 15.1 53.7 83  
MINOR FAULTING VALUES 60.7 44.6 6 12.5 50.7 73  
MAJOR FAULTING VALUES 59.8 41.6 11 11.5 49.7 68

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 2

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=NORTH DAKOTA STATION=CARRINGTON NURSERY=UNIFORM

VARIETY STD	TEST WT	1000 K. WT	% LG SM	WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES TW KW SM WP SX DU
LAKER	61.4	40.5	52	3	13.1	92	80	5	4	MI
LLOYD	60.8	42.6	43	2	13.0	89	90	3	4	
MEDORA	62.0	41.8	58	2	14.1	92	90	4	4	
MINDUM	60.5	37.3	34	3	13.1	85	90	2	3	MI MJ
MONROE	61.5	43.3	57	2	13.7	87	85	3	4	
RUGBY	62.7	41.7	52	2	13.8	90	75	1	4	
S	61.4	38.6	42	2	13.3	84	85	3	4	MI
SCEPTRE	63.2	44.1	60	1	13.8	92	85	3	4	
VIC	63.0	42.9	57	2	14.2	95	85	2	4	
WARD	61.8	40.8	49	3	13.4	87	90	3	4	MI
D 8012	61.1	41.0	43	3	13.1	81	90	3	4	
D 8016	63.2	41.5	60	2	13.4	89	80	4	4	
D 8019	62.5	39.5	37	3	13.5	90	75	3	4	MI
D 8172	62.2	42.9	53	3	13.1	92	80	3	4	
D 8191	62.8	42.6	59	2	13.7	88	90	3	4	
D 8193	63.3	42.4	57	2	13.3	90	90	3	4	
D 8194	62.6	44.6	57	1	13.1	87	90	3	4	
D 8261	62.8	45.2	61	1	12.8	85	90	3	4	
D 8263	62.4	45.2	51	1	12.5	88	80	3	3	MI
D 8269	62.3	45.5	51	1	12.4	90	90	3	3	MI
D 8279	61.8	41.5	45	1	13.0	86	90	3	4	
D 8291	63.2	44.8	12	2	12.8	89	95	3	4	
D 79168	62.5	40.8	42	2	12.9	89	85	2	4	MI
D 79209	62.2	41.8	55	2	12.9	84	90	2	4	
D 81151	63.6	40.7	53	2	13.7	90	95	3	4	MI
D 81154	63.4	40.2	40	1	12.9	89	90	3	4	MI
D 81183	63.8	42.4	55	1	13.3	91	70	3	2	MI
D 82136	63.0	45.0	58	1	12.8	90	85	3	4	
FA 883-323	63.4	43.1	51	1	13.0	89	85	3	4	
NHD 81-466	63.4	44.4	60	2	13.3	100	90	3	3	MI
NHD 81-485										

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 63.0 42.9 2 13.9 57.3 82  
MINOR FAULTING VALUES 60.8 40.8 7 12.5 54.3 72  
MAJOR FAULTING VALUES 59.9 37.8 12 11.5 53.3 67

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 3

QUALITY DATA OF DURUM SAMPLES      1986 CROP  
STATE=NORTH DAKOTA    STATION=CARRINGTON    NURSERY=UNIFORM

VARIETY STD	TEST WT	1000 K.WT	% LG SM		WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES					
			LG	SM							TW	KW	SM	WP	SX	DU
LAKER	56.7	35.5	29	3	13.9	89	53.5	85	5	3						
LLOYD	53.8	36.6	13	5	13.9	87	55.0	85	6	3						
MEDORA	57.0	37.6	40	2	13.8	91	58.5	85	6	4						
MINDUM	57.6	34.7	17	5	12.7	83	55.7	70	2	1						
MONROE	55.5	40.2	50	2	13.8	88	56.0	90	4	4						
RUGBY	58.2	40.5	41	2	13.5	92	58.2	85	2	4						
SCEPTRE	55.4	35.8	31	3	13.3	88	56.2	85	5	4						
VIC	57.2	39.4	41	3	14.0	90	57.2	90	5	4						
WARD	57.4	37.6	37	3	13.8	100	54.8	85	2	4						
D 8012	57.2	38.5	44	3	13.6	84	57.2	95	5	4						
D 8016	55.2	36.8	25	5	14.4	82	56.5	90	5	4						
D 8019	56.6	35.1	37	2	13.9	86	57.6	85	5	4						
D 8172	58.8	38.5	28	3	13.6	95	58.5	85	3	4						
D 8191	56.7	34.0	27	4	13.5	88	54.1	85	4	3						
D 8193	56.4	32.9	28	5	14.3	86	56.0	85	5	3						
D 8194	55.8	32.9	28	5	13.9	84	53.4	90	4	4						
D 8261	56.7	35.8	25	5	13.9	88	53.8	95	4	4						
D 8263	56.7	34.8	23	4	13.7	86	55.7	95	3	4						
D 8269	57.0	35.3	21	4	13.3	93	56.5	85	3	4						
D 8279	57.0	35.5	19	4	13.5	92	56.0	90	3	4						
D 8291	53.4	32.1	8	6	13.8	88	54.3	90	4	2						
D 79168	57.5	36.4	21	4	13.8	88	56.3	95	4	4						
D 79209	57.2	33.2	9	5	13.1	88	56.7	90	3	3						
D 81151	57.6	35.5	40	4	13.0	89	56.7	95	4	4						
D 81154	58.7	36.8	32	3	13.5	91	57.3	95	4	4						
D 81183	56.6	32.3	6	7	13.7	95	54.6	90	5	3						
D 82136	57.1	31.7	9	6	13.8	91	51.2	80	5	1						
FA 883-323	58.2	36.8	35	3	13.4	87	52.9	90	4	3						
NHD 81-466	55.9	34.6	14	5	13.2	82	54.1	90	4	4						
NHD 81-485	59.0	36.9	30	3	13.8	91	52.6	95	4	2						

## DEFICIENCIES

AVG OF STANDARDS      TW   KW   SM   WP   SX   DU  
 MINOR FAULTING VALUES 57.6 39.2 3 13.8 56.7 87  
 MAJOR FAULTING VALUES 55.4 37.1 8 12.5 53.7 77  
 MAJOR FAULTING VALUES 54.5 34.1 13 11.5 52.7 72

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



TABLE 4

QUALITY DATA OF DURUM SAMPLES  
STATE=SOUTH DAKOTA STATION=DAY CO.  
1986 CROP  
NURSERY=UNIFORM

VARIETY STD	TEST WT	1000 K.WT	% LG SM		WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES					
			9	5							TW	KW	SM	WP	SX	DU
CROSBY	59.0	34.1	9	5	14.8	94	55.0	90	3	4						
EDMORE	59.7	37.6	19	3	15.5	95	52.2	90	5	4						
LAKER	58.8	35.7	21	4	14.7	92	51.9	85	6	3					MI	
LLOYD	57.1	35.2	13	6	14.2	80	53.3	90	5	4						
MEDORA	60.6	37.5	27	3	14.5	99	53.3	90	4	4						
MINDUM	61.4	32.3	14	4	14.1	91	53.1	70	2	1	MI					MJ
MONROE	59.6	36.0	25	3	14.5	87	53.5	85	5	4						
RUGBY	58.7	33.0	10	5	14.8	88	53.6	80	2	4	MI					
SCEPTRE	58.0	32.5	13	5	14.7	78	53.3	85	5	4	MI					
VIC	59.6	38.2	25	3	14.8	90	56.7	90	4	4						
WARD	59.7	34.4	13	5	14.5	89	51.6	90	3	3					MI	
D 8012	59.8	35.6	29	3	14.5	94	53.1	95	5	4						
D 8016	58.6	33.9	10	6	15.2	92	54.7	95	6	4						
D 8019	58.1	33.9	14	4	15.9	91	52.9	85	6	4						
D 8172	60.7	35.0	6	5	14.6	105	54.5	85	5	4						
D 8191	58.6	36.0	15	4	14.6	89	52.4	90	5	4						
D 8193	58.3	33.1	12	5	14.8	89	52.4	90	6	4	MI					
D 8194	58.7	32.1	11	5	14.9	96	51.2	90	6	3	MI					
D 8261	58.1	35.0	11	6	14.6	90	51.7	95	7	3	MI					
D 8263	58.4	33.9	10	5	14.5	89	55.0	85	6	4						
D 8269	57.8	35.2	10	6	14.4	94	54.0	85	7	4						
D 8279	58.6	35.2	11	5	14.2	90	55.5	90	6	4						
D 8291	56.0	28.9	3	13	14.9	92	50.0	95	7	1	MJ	MJ	MI			MJ
D 79168	59.7	34.6	6	7	14.6	90	55.5	95	6	4						
D 79209	59.2	32.8	5	7	14.2	99	53.5	90	5	4						
D 81151	57.0	31.0	11	7	14.9	95	48.8	95	5	2	MI					MJ
D 81154	58.8	32.5	9	6	14.9	96	51.4	100	6	3	MI					MI
D 81183	58.3	31.5	5	9	14.6	95	50.7	90	7	2	MI	MI				MJ
D 82136	58.7	31.1	4	8	14.7	95	48.1	80	4	2	MI					MJ
FA 883-323	58.9	35.3	15	3	15.1	93	54.7	95	5	4						
NHD 81-466	58.4	31.4	3	11	14.7	90	49.1	95	5	2	MI	MI				MJ
NHD 81-485	60.9	35.3	19	4	14.6	90	50.7	100	7	2						MJ

## DEFICIENCIES

AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



TABLE 5

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=SOUTH DAKOTA STATION=SELBY NURSERY=UNIFORM

VARIETY STD	TEST WT	1000 K.WT	LG SM	WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES TW KW SM WP SX DU
CROSBY	60.0	35.6	19 3	14.0	95	52.8	90	2	4	MI
EDMORE	59.3	41.0	30 2	15.0	90	55.7	95	3	4	
LAKER	60.7	39.1	12 3	12.6	93	55.6	85	3	4	
LLOYD	58.2	36.5	12 4	13.0	90	52.3	95	4	2	MJ MI MI
MEDORA	61.2	39.5	44 1	13.2	100	54.2	95	3	4	
MINDUM	62.2	37.3	30 3	12.7	81	57.7	75	1	2	MI
MONROE	59.9	42.4	50 2	13.6	99	53.0	85	3	4	
RUGBY	61.7	39.1	32 3	13.2	95	54.2	90	2	4	
SCEPTRE	57.8	34.2	22 4	13.7	90	51.6	90	4	1	MJ MI MJ
VIC	61.3	40.7	35 2	13.4	93	55.4	90	4	4	
WARD	61.0	36.4	29 3	13.4	95	57.2	85	2	4	MI
D 8012	60.9	37.3	43 2	13.6	91	57.4	95	4	4	
D 8016	59.9	38.6	22 3	13.3	94	56.9	90	4	4	
D 8019	59.7	40.2	38 2	13.3	90	56.2	80	4	4	
D 8172	61.5	36.5	9 4	12.9	94	57.2	80	3	4	MI
D 8191	60.3	37.6	36 2	13.0	99	56.9	85	3	4	
D 8193	61.2	40.0	42 2	12.7	98	56.0	85	3	4	
D 8194	60.6	36.5	26 3	13.4	95	54.4	90	3	4	MI
D 8261	61.7	39.5	27 2	12.5	92	57.7	95	3	3	
D 8263	60.1	37.6	19 3	12.6	89	56.3	95	4	4	
D 8269	60.9	38.2	28 2	13.1	99	53.5	85	4	4	
D 8279	60.0	40.5	17 3	12.0	93	53.7	90	3	3	MI
D 8291	57.5	34.4	5 6	13.2	88	54.9	90	4	3	MJ MI MI
D 79168	61.5	38.3	11 3	12.3	89	55.8	95	3	3	
D 79209	60.6	34.8	5 4	12.6	90	54.2	90	3	4	MI
D 81151	58.2	37.2	26 3	13.6	95	52.3	90	3	2	
D 81154	61.4	36.6	19 3	12.7	90	55.3	100	3	4	MI
D 81183	61.4	34.1	6 4	12.6	92	52.3	90	3	3	MI
D 82136	61.4	33.3	8 4	13.1	94	52.1	75	3	1	MJ MI MI
FA 883-323	59.5	38.6	27 2	13.3	90	56.6	90	3	4	
NHD 81-466	61.0	36.1	12 3	12.6	87	49.8	85	3	2	MI MJ
NHD 81-485	62.3	38.8	42 3	12.5	92	52.8	95	4	3	MI

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 61.3 38.7 3 13.3 55.6 88  
MINOR FAULTING VALUES 59.1 36.6 8 12.5 52.6 78  
MAJOR FAULTING VALUES 58.2 33.6 13 11.5 51.6 73

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 6

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=MONTANA STATION=BOZEMAN NURSERY=UNIFORM

VARIETY	STD	TEST WT	1000 K.WT	% LG SM	WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES TW KW SM WP SX DU
LAKER		62.7	44.2	58	1	14.0	99	60.2	74	1	MJ
LLOYD		61.4	40.2	23	2	13.6	101	57.8	90	4	MI
MEDORA		60.9	42.4	48	1	14.9	100	56.7	85	4	
MINDUM		61.6	35.1	22	4	15.2	99	58.9	85	3	MJ
MONROE		61.6	50.8	73	2	15.0	100	55.8	90	4	
RUGBY	S	62.0	41.5	43	2	14.9	105	55.7	90	1	
SCEPTRE		61.5	42.7	50	2	14.6	101	58.1	90	4	
VIC	S	61.9	43.5	50	1	14.9	98	59.9	95	3	
WARD	S	62.1	43.7	54	2	15.1	104	58.1	90	2	
D 8012		61.2	41.0	46	2	14.2	91	59.5	105	4	
D 8016		60.4	42.4	38	2	14.5	95	56.9	95	4	
D 8019		60.9	45.2	55	2	15.2	97	57.9	85	4	
D 8172		61.6	39.5	18	3	14.5	100	59.0	90	3	MI
D 8191		62.2	43.7	49	2	14.0	102	58.9	95	3	
D 8193		61.9	44.1	54	2	14.7	97	57.7	95	4	
D 8194		62.6	42.7	49	2	14.1	104	56.9	95	4	
D 8261		62.1	43.3	34	2	13.5	100	58.4	105	3	
D 8263		62.0	42.9	36	2	13.5	93	58.1	100	3	
D 8269		61.3	40.7	17	2	13.7	95	58.6	95	4	MI
D 8279		60.8	42.7	25	3	13.7	101	57.2	95	4	
D 8291		60.2	40.7	14	3	13.6	96	55.6	100	3	MI
D 79168		62.5	41.5	20	1	14.0	96	58.1	110	6	
D 79209		61.0	40.3	25	2	13.7	97	58.7	95	4	MI
D 81151		61.5	40.5	46	2	14.0	97	58.6	95	4	MI
D 81154		61.6	40.5	30	2	14.9	98	58.4	105	4	MI
D 81183		61.8	37.5	12	4	13.8	98	55.8	100	3	MJ
D 82136		61.2	39.8	29	2	14.3	97	55.8	85	4	MI
FA 883-323		61.8	42.9	42	1	14.3	97	58.8	100	3	
NHD 81-466		62.4	41.8	35	2	13.8	103	53.1	100	2	MJ
NHD 81-485		62.7	42.9	60	1	14.4	99	57.2	100	4	

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 62.0 42.9 2 15.0 57.9 92  
MINOR FAULTING VALUES 59.8 40.8 7 12.5 54.9 82  
MAJOR FAULTING VALUES 58.9 37.8 12 11.5 53.9 77

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=MONTANA STATION=SIDNEY NURSERY=UNIFORM

TABLE 7

VARIETY	STD	TEST WT	1000 K.WT	% LG SM	WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES TW KW SM WP SX DU
LAKER		62.3	46.5	44	1	13.0	95	59.4	4	4	
LLOYD		63.8	44.8	56	0	13.7	97	61.2	4	4	
MEDORA		62.5	40.8	43	1	14.6	100	58.8	2	4	MI
MINDUM		63.0	48.8	72	1	13.1	97	62.2	5	2	MI
MONROE		62.5	43.1	47	1	14.5	97	59.3	5	4	
RUGBY	S	63.3	43.5	55	1	14.6	101	59.9	5	4	
SCEPTRE		62.3	45.2	68	0	15.4	97	59.1	4	2	MI
VIC	S	63.0	45.5	51	0	13.6	88	61.5	3	4	
WARD	S	63.0	43.5	44	1	14.9	102	59.7	3	4	
D 8012		63.6	43.7	37	0	13.5	91	59.3	3	4	
D 8016		62.6	45.2	65	1	14.8	99	60.9	3	4	
D 8019		61.3	41.7	50	1	14.1	95	59.7	3	4	MI
D 8172		63.1	40.7	41	1	14.9	97	60.0	3	2	MI
D 8191		62.1	43.9	34	1	14.0	95	60.3	3	4	
D 8193		62.1	46.7	58	2	14.6	95	59.6	3	4	
D 8194		63.4	41.7	40	0	13.5	86	59.8	5	4	MI
D 8261		63.3	40.5	53	0	14.5	94	57.3	5	1	MI MJ
D 8263		63.1	46.1	59	1	14.5	92	58.4	6	4	
D 8269		63.0	41.2	33	0	13.6	92	59.7	3	4	MI
D 8279		62.6	45.5	38	1	13.1	92	59.8	4	4	
D 8291		61.7	46.7	62	1	14.5	96	59.7	6	4	
D 79168		63.2	38.2	26	3	14.3	93	59.9	2	1	MJ
D 79209		62.6	47.6	58	0	15.0	96	60.7	4	4	
D 81151		62.0	46.3	50	0	14.3	97	61.3	4	2	MI
D 81154		63.1	46.3	62	2	14.1	92	60.7	4	4	
D 81183		62.2	46.3	54	2	14.3	93	59.5	3	4	
D 82136		62.0	42.4	48	3	14.4	98	57.7	4	4	
FA 883-323		62.7	40.0	41	1	14.6	95	59.4	2	4	MI
NHD 81-466		62.6	44.1	60	1	15.1	96	59.9	5	4	
NHD 81-485		63.4	47.8	50	0	13.8	90	61.1	3	4	

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 63.1 44.2 1 14.4 60.4 98  
MINOR FAULTING VALUES 60.9 42.1 6 12.5 57.4 88  
MAJOR FAULTING VALUES 60.0 39.1 11 11.5 56.4 83

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 8

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-MINNESTOA STATION=CROOKSTON NURSERY=UNIFORM

VARIETY	STD	TEST WT	1000 K. WT	% LG SM	WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES					
											TW	KW	SM	WP	SX	DU
LAKER		56.8	31.8	12	6	14.1	98	57.4	4	1	MJ	MI				MI
LLOYD		55.4	29.8	5	9	15.0	90	57.7	8	3	MJ	MI	MI			
MEDORA		61.3	35.1	24	2	14.4	100	59.0	6	4						
MINDUM		59.4	29.2	4	10	12.3	80	59.2	2	1			MJ	MI		MJ
MONROE		60.0	36.4	27	2	14.0	94	59.1	6	4						
RUGBY	S	60.5	33.7	17	4	13.8	96	58.2	2	4						
SCEPTRE		58.7	32.3	7	6	14.3	92	57.0	6	4		MI				
VIC	S	60.2	37.9	25	3	14.2	93	59.1	6	4						
WARD	S	60.3	32.6	17	4	14.2	91	56.7	2	4		MI				
D 8012		58.7	34.5	35	4	14.1	91	57.8	5	4						
D 8016		59.0	33.6	9	6	14.6	94	59.0	6	4						
D 8019		59.4	31.7	17	3	14.8	91	58.0	6	4		MI				
D 8172		60.4	34.1	12	4	13.8	90	60.9	4	4						
D 8191		58.7	33.0	14	5	14.3	91	58.2	5	4						
D 8193		58.4	31.4	10	6	15.2	93	58.1	7	4		MI				
D 8194		59.4	31.0	8	6	14.4	95	56.3	7	4		MI				
D 8261		57.7	30.5	6	8	14.2	94	57.4	6	4		MI	MI			
D 8263		57.5	31.1	9	7	14.5	89	57.3	5	4		MI	MI			
D 8269		57.3	32.4	6	7	13.8	91	58.1	5	4		MI	MI			
D 8279		57.8	33.8	7	7	14.2	92	56.9	5	4		MI				
D 8291		56.1	28.5	2	14	14.7	94	54.7	5	1		MJ	MJ			MI
D 79168		58.4	30.8	6	11	13.7	90	59.4	5	4		MI	MI			
D 79209		59.0	31.5	4	8	13.8	96	58.1	5	4						
D 81151		58.2	33.0	19	4	13.0	87	57.5	3	4						
D 81154		59.0	30.3	6	7	14.2	90	59.9	5	4						
D 81183		59.7	29.8	6	10	13.9	90	58.3	5	4						
D 82136		56.8	26.0	0	15	15.4	94	53.5	6	1			MI			
F 883		58.2	33.9	12	7	14.2	90	59.7	5	4		MJ	MJ			MJ MI
NHD 81-466		56.0	27.4	1	16	15.4	92	55.2	8	1		MJ	MJ			
NHD 81-485		60.2	32.5	10	5	14.6	97	57.1	8	4						

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 60.3 34.7 4 14.1 58.0 87  
MINOR FAULTING VALUES 58.1 32.6 9 12.5 55.0 77  
MAJOR FAULTING VALUES 57.2 29.6 14 11.5 54.0 72

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES	1986 CROP
STATE=CALIFORNIA	STATION=TULELAKE NURSERY=WESTERN REGIONAL DURUM

DEFICIENCIES	TW	KW	SM	WP	SX	DU
AVG OF STANDARDS	64.1	46.5	1	13.7	56.1	80
MINOR FAULTING VALUES	61.9	44.4	6	12.5	53.1	70
MAJOR FAULTING VALUES	61.0	41.4	11	11.5	52.1	65

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=WASHINGTON STATION=ROYAL SLOPE NURSERY=WESTERN REGIONAL DURUM

TABLE 10

VARIETY STD	TEST WT	1000 K.WT	% LG SM		WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
			TW	KW							SM	WP	SX	DU																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
S	ALDURA	64.8	48.5	26	0	12.9	111	54.0	90	2	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

DEFICIENCIES TW KW SM WP SX DU  
AVG OF STANDARDS 64.4 48.5 0 12.0 56.7 80  
MINOR FAULTING VALUES 62.2 46.4 5 12.5 53.7 70  
MAJOR FAULTING VALUES 61.3 43.4 10 11.5 52.7 65

\*\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=WASHINGTON STATION=WALLA WALLA NURSERY=WESTERN REGIONAL DURUM

TABLE 11

VARIETY	STD	TEST WT	1000 K.WT	% LG SM		WHT PRO	HARD NESS	SEMO EXTR	DUST COLOR	MIXO SCR	SCORE ***	DEFICIENCIES						
				TW	KW							SM	WP	SX	DU			
S	ALDURA	63.4	46.7	72	0	12.8	114	56.7	85	2	4							
	CARC 'S'	63.8	44.4	74	0	11.6	99	57.3	65	2	1		MI			MI		
	DUROX	62.3	50.3	76	1	12.1	105	57.4	85	3	3			MI				
	IRRIDUR	63.5	45.7	68	0	13.5	108	56.9	80	3	4							
	LAKER	64.2	52.9	84	0	12.2	105	61.8	70	4	3				MI			
S	LLOYD	63.7	51.8	73	0	11.6	101	59.4	85	3	3			MI				
S	MODOC	63.4	44.1	66	1	12.5	90	57.8	65	3	1		MI				MI	
	SIGNADUR	62.9	49.8	76	0	13.0	102	56.6	80	2	4							
	TURBO	64.3	50.5	81	1	12.1	106	59.9	90	4	3				MI			
	VIC 1A	64.6	48.8	70	0	11.8	102	61.1	90	3	3				MI			
	VIC 220	63.0	44.6	68	0	13.2	104	56.9	80	3	4			MI				
	WAID	63.4	41.8	52	1	12.6	109	58.3	80	2	3			MJ				
	YAV 'S'	64.2	48.8	81	0	11.6	105	58.5	75	3	3				MI			
	YAVAROS 79	64.4	48.5	77	0	11.8	106	56.5	70	3	3				MI			
	YGA 'S'	65.0	43.7	75	1	11.9	109	61.9	75	3	3			MI				
	WPB 881	63.4	52.9	86	0	14.2	107	59.6	90	7	4							
	D 79209	64.3	42.7	46	1	11.8	105	61.4	85	2	3			MI				
	HD 810466	63.8	44.4	53	1	12.2	100	59.6	85	3	3			MI				
	T8300136	62.7	44.8	58	1	11.6	106	60.0	75	2	3			MI				
	T8300138	62.6	46.9	61	0	12.6	102	58.6	85	2	4							
	T8300140	63.4	47.1	66	1	12.1	108	59.5	85	3	3				MI			
	T8300147	63.0	41.2	45	1	12.6	99	57.3	80	2	3			MJ				
	T8300175	63.8	40.0	44	2	12.8	109	55.7	80	3	3			MJ				
	T8300179	62.6	40.0	35	2	12.4	110	55.2	80	3	2			MJ				
	TL 730471	63.8	46.9	69	0	12.4	98	57.5	65	3	1				MI		MI	
	UC 499	63.0	47.6	76	1	12.6	101	61.8	85	3	4							
	UC 606	64.6	46.7	71	0	13.0	106	58.8	80	2	4							
	UC 640	63.8	49.8	73	0	11.9	99	60.9	85	1	3				MI			
	UC 642	64.6	49.3	68	1	12.5	100	60.9	85	2	3				MI			
	UC 647	63.5	54.3	83	0	13.1	109	56.4	75	3	4							

DEFICIENCIES

TW KW SM WP SX DU  
AVG OF STANDARDS 63.5 47.5 0 12.3 58.0 78  
MINOR FAULTING VALUES 61.3 45.4 5 12.5 55.0 68  
MAJOR FAULTING VALUES 60.4 42.4 10 11.5 54.0 63

...EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE.

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=ARIZONA STATION=MESA NURSERY=FIELD PLOT

TABLE 12

-----VARIETY-----																		
TEST	1000	SIZING	WHT		WHT	PRO	HARD- NESS	FALL	TOTL	SEMO		SPK	SEMO	DUST	MIXO			
			LG	SM						ASH	%					EXTR	%	ASH
WT	K.WT	%	%	%	#/BU	G.		SEC	%	%								
S	63.7	50.3	75	1	1.55	14.1	112	400	76.3	59.9	7	0.62	90	1				
ALDURA	62.5	50.8	79	2	1.72	14.1	101	400	76.4	61.1	13	0.72	85	5				
B 84-115B	64.1	56.5	87	0	1.64	14.6	108	400	75.9	59.5	17	0.65	85	3				
B 84-320	63.0	54.6	83	1	1.67	14.0	98	400	77.4	60.8	40	0.71	85	6				
W 423	63.7	51.3	79	1	1.48	13.6	95	400	78.0	62.2	10	0.63	100	5				
W 584	62.8	50.3	80	2	1.57	13.9	119	400	77.4	61.4	17	0.63	85	1				
W 710	63.8	51.3	78	2	1.57	13.6	104	400	76.9	60.4	20	0.66	95	4				
W 714	63.3	59.5	91	0	1.68	15.0	115	400	74.8	59.2	23	0.66	75	1				
W 715	62.8	57.8	77	1	1.66	14.1	114	400	76.6	61.7	27	0.69	85	3				
W 742	62.6	48.8	63	1	1.78	13.8	101	400	77.2	62.0	23	0.72	80	3				
W 748	64.3	53.8	80	2	1.59	13.3	101	400	75.7	59.2	11	0.61	70	4				
W 770	62.8	51.0	78	1	1.80	14.7	103	400	76.3	59.6	37	0.74	90	5				
W 798																		

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=ARIZONA STATION=MESA NURSERY=FIELD PLOT

VARIETY	STD	SEMO		VIS	COOK	FIRM-		SCORE	DEFICIENCIES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		PRO	X			WT	NESS		RES	G.	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
ALDURA	S	12.3	10.0	30.8	5.03	7.1	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							</

DEFICIENCIES TW KW SM WP TX SX DU SK SP VI FR  
AVG OF STANDARDS 63.7 50.3 1 14.1 76.3 59.9 90 7 12.3 10.0 5.03  
MINOR FAULTING VALUES 61.5 48.2 6 12.5 73.6 56.9 80 17 11.5 9.0 3.53  
MAJOR FAULTING VALUES 60.6 45.2 11 11.5 72.8 55.9 75 22 11.0 8.5 2.78

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

TABLE 13

-----VARIETY-----	STD	TEST		1000		SIZING		WHT		HARD-		FALL		TOTL		SEMO		DUST		MIXO	
		WT	#/BU	K.WT	G.	LG	SM	ASH	PRO	NESS	SEC	NO	EXTR	EXTR	%	SEMO	SPK	ASH	COLOR	SCORE	
						%	%	%	%				%	%		%		%			
1986 N.D. STANDARD S	63.6	46.7	75	2	1.80	13.9	72	400	81.6	61.9	37	0.73	95	5							
699-1	63.9	47.8	75	0	1.57	14.3	133	400	81.8	63.8	23	0.70	70	3							
699-2	63.7	51.8	83	1	1.79	15.0	112	400	81.7	65.1	63	0.77	80	3							
699-3	64.1	51.5	81	1	1.66	13.0	115	400	80.6	62.7	33	0.70	85	3							
669-4	63.5	45.7	74	1	1.62	13.2	123	400	77.8	61.2	30	0.64	75	2							
699-5	63.6	45.7	74	1	1.66	12.5	108	400	78.8	60.6	27	0.66	70	2							
699-6	63.6	47.1	79	0	1.58	13.6	107	400	77.1	58.8	27	0.65	85	3							
699-7	63.6	45.7	74	1	1.69	13.6	106	400	76.3	57.9	27	0.65	80	6							
699-8	64.0	50.5	87	0	1.75	15.8	112	400	77.8	57.5	27	0.65	85	3							
699-9	62.8	47.4	75	1	1.70	14.0	117	400	76.5	58.1	23	0.65	70	3							
699-10	65.6	48.8	79	0	1.60	14.6	119	400	73.4	57.6	47	0.61	65	5							
699-11	64.7	47.8	74	0	1.61	12.7	109	400	76.7	59.6	33	0.62	70	3							
699-12	64.3	53.5	80	1	1.63	13.1	110	400	76.8	60.0	30	0.60	80	1							
699-13	65.3	54.3	84	0	1.59	13.3	115	400	74.9	58.2	37	0.56	65	3							
699-14	65.3	55.9	92	0	1.58	12.6	104	400	77.1	60.4	27	0.59	65	2							
699-15	65.3	48.1	71	0	1.52	12.6	111	400	78.4	60.8	37	0.61	75	2							
699-16	65.3	57.3	90	0	1.65	13.2	103	400	78.2	60.9	20	0.67	85	2							
699-17	64.5	54.6	90	0	1.63	12.7	114	400	80.8	62.5	23	0.65	90	3							
699-18	65.5	51.0	84	1	1.53	12.5	112	400	75.2	57.4	7	0.64	75	3							
699-19	66.3	51.5	83	0	1.58	14.1	105	400	76.5	52.7	20	0.58	95	2							
699-20	63.7	61.3	88	1	1.53	12.0	105	400	77.7	61.0	20	0.62	80	3							
699-21	66.0	59.9	90	1	1.46	11.6	113	400	77.9	60.3	30	0.56	75	3							
699-22	65.9	51.3	83	1	1.60	13.4	114	400	76.8	58.2	37	0.58	95	2							
699-23	65.7	52.6	85	0	1.68	13.8	118	400	76.0	56.5	43	0.61	90	3							
699-24	65.0	51.0	80	1	1.52	12.0	107	400	77.5	60.6	20	0.61	85	2							
699-25	64.2	51.8	85	0	1.75	14.0	114	400	76.7	58.8	37	0.66	70	2							
699-26	62.6	56.5	85	1	1.66	12.8	111	400	78.4	61.7	23	0.68	90	3							
699-27	62.4	47.8	80	1	1.67	12.5	112	400	76.5	59.0	23	0.65	80	4							
699-28	63.6	54.6	86	1	1.51	12.4	122	400	77.4	61.0	40	0.57	75	1							
699-29	64.2	48.3	70	1	1.58	13.1	114	400	77.7	59.1	30	0.64	95	3							
699-30	63.7	56.2	84	0	1.66	12.9	114	400	77.8	61.5	30	0.65	95	1							
699-31	64.7	59.5	92	0	1.56	11.9	102	400	78.3	63.4	33	0.64	80	3							
699-32	64.3	51.8	83	0	1.56	12.7	118	400	75.6	60.2	33	0.73	90	3							
699-33	64.2	52.1	83	0	1.68	13.6	112	400	77.0	57.8	27	0.63	75	4							
699-34	62.9	53.5	83	1	1.79	13.1	109	400	78.1	60.8	37	0.65	90	3							
699-35	64.5	51.0	79	0	1.69	14.0	105	400	75.3	57.6	17	0.63	80	4							

TABLE 13 (Cont.)

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

-----VARIETY-----																
TEST	WT	#/BU	1000 K.WT	SIZING		WHT ASH	WHT PRO	HARD- NESS	FALL NO	TOTL EXTR	SEMO EXTR	SPK	SEMO ASH	DUST COLOR	MIXO SCORE	
				LG	SM											
			G.	%	%	%	%		SEC	%	%		%			
1986 N.D.	STANDARD	S	63.6	46.7	75	2	1.80	13.9	72	400	81.6	61.9	37	0.73	95	5
6999-36			64.2	46.3	77	0	1.66	13.5	115	400	77.7	59.7	50	0.63	85	2
6999-37			64.5	53.2	86	0	1.74	13.9	114	400	77.0	57.6	30	0.66	85	3
6999-38			65.3	51.0	81	0	1.60	12.4	110	400	76.9	59.1	7	0.63	95	3
6999-39			64.3	44.4	70	1	1.69	12.2	110	400	75.5	57.7	60	0.67	95	3
6999-40			65.1	53.8	81	0	1.63	12.8	111	400	75.3	58.2	50	0.65	90	3
6999-41			65.7	52.6	87	0	1.65	11.8	112	400	74.8	57.7	37	0.63	85	3
6999-42			64.6	50.8	82	0	1.71	11.9	114	400	75.2	56.9	30	0.64	95	1
6999-43			64.3	48.8	86	0	1.80	13.9	115	400	76.3	57.3	47	0.69	75	3
6999-44			63.4	44.2	65	1	1.63	13.1	111	400	74.6	55.2	37	0.65	90	3
6999-45			63.1	46.3	79	1	1.85	13.7	120	400	76.1	57.8	33	0.74	95	3
6999-46			64.3	48.1	76	0	1.55	13.1	116	400	76.1	58.2	20	0.65	90	2
6999-47			63.4	46.5	71	1	1.65	13.4	115	400	82.9	57.6	23	0.62	90	3
6999-48			63.7	45.5	73	0	1.62	13.0	117	400	78.0	59.1	23	0.69	110	1
6999-49			65.1	44.6	72	0	1.63	12.5	118	400	78.0	57.4	20	0.65	105	1
6999-50			63.5	51.5	83	0	1.59	13.4	119	400	78.1	59.7	37	0.65	85	4

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

[illegible]



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

TABLE 13 (Cont.)

-----VARIETY-----										-----DEFICIENCIES-----									
SEM	PRO	VIS	COOK	FIRM-	SCORE	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR			
%		COL	WT	NESS	RES	G.													
STANDARD	S																		
1986 N.D.	13.1	10.0	31.5	5.64	6.5	4													
699-16	11.6	10.0	31.6	5.21	6.6	1											MI		
699-17	11.1	10.0	31.7	5.36	6.9	3											MI		
699-18	10.7	.	.	.	.	1											MJ		
699-19	11.8	.	.	.	.	1											MJ		
699-20	10.4	9.5	31.6	4.97	7.2	1											MJ		
699-21	10.0	10.0	31.6	5.16	6.7	1											MJ		
699-22	11.3	10.0	31.9	4.58	6.9	1											MJ		
699-23	11.6	10.0	30.5	5.77	6.8	1											MI		
699-24	10.5	10.0	33.1	4.45	7.1	1											MJ		
699-25	12.1	10.0	32.3	4.99	6.7	1											MJ		
699-26	10.9	10.0	30.8	4.90	6.0	1											MJ		
699-27	10.9	10.0	30.7	4.80	5.7	1											MJ		
699-28	10.9	9.0	32.0	3.65	6.6	1											MJ		MI
699-29	11.3	10.0	30.4	5.03	7.3	1											MJ		MI
699-30	11.6	10.0	33.0	4.47	6.0	2											MI		
699-31	10.5	10.0	31.8	5.36	7.1	1											MJ		
699-32	11.6	10.0	21.5	6.18	5.6	2											MJ		
699-33	11.9	10.0	31.4	5.27	6.4	1											MJ		
699-34	11.3	10.0	31.4	5.36	7.1	1											MJ		MI
699-35	11.9	10.0	29.8	6.46	6.3	1											MJ		
699-36	11.5	10.0	31.0	5.27	6.5	1											MI		MI
699-37	11.8	10.0	31.2	6.16	5.7	1											MJ		
699-38	11.0	10.0	32.1	5.64	6.6	1											MJ		
699-39	10.8	10.0	31.2	5.98	6.4	1											MI		
699-40	10.9	10.0	30.9	6.13	6.1	1											MI		
699-41	9.9	10.0	31.2	5.90	6.9	1											MI		
699-42	10.3	10.0	34.9	4.86	7.2	1											MI		
699-43	12.1	10.0	32.3	6.72	6.3	1											MJ		MI
699-44	11.3	10.5	32.8	6.74	5.6	1											MJ		
699-45	12.6	10.0	30.9	6.44	5.9	1											MJ		
699-46	11.3	9.5	32.8	5.05	5.7	1											MI		
699-47	11.6	10.0	32.8	5.57	6.3	2											MJ		
699-48	11.8	10.0	34.7	4.49	6.9	2											MJ		
699-49	11.2	10.0	34.2	4.90	6.8	1											MI		MI
699-50	11.5	10.0	32.9	5.90	5.6	1											MJ		MI

DEFICIENCIES

AVG OF STANDARDS 63.6 46.7 2 13.9 81.6 61.9 95 37 13.1 10.0 5.64  
MINOR FAULTING VALUES 61.4 44.6 7 12.5 79.1 58.9 85 47 11.5 9.0 4.14  
MAJOR FAULTING VALUES 60.5 41.6 12 11.5 78.1 57.9 80 52 11.0 8.5 3.39

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE







QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

TABLE 14

VARIETY	STD	TEST		1000		SIZING		WHT		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST		MIXO
		WT	#/BU	K.WT	G.	LG	%	ASH	%	PRO	%	NESS	SEC	NO	SEC	EXTR	%	EXTR	%	SPK	ASH	COLOR	SCORE	
1986 N.D.	STANDARD S	63.6		46.7		75		1.80		13.9		72		400		81.6		61.9		37	0.73	95		5
6011-1		64.9		56.8		90		1.61		13.1		109		400		77.9		61.3		27	0.64	70		2
6100-2		64.6		56.5		88		1.64		13.2		113		400		78.3		61.6		37	0.69	75		3
6100-3		64.4		58.5		92		1.61		13.7		115		400		76.8		60.9		37	0.64	80		3
6100-4		64.0		47.4		63		1.54		11.7		119		400		79.1		60.7		27	0.65	75		3
6100-5		63.4		57.1		87		1.61		12.5		119		400		79.6		62.0		53	0.68	100		3
6100-6		65.0		52.9		90		1.62		13.4		116		400		78.3		61.3		40	0.65	85		3
6100-7		65.6		51.8		81		1.61		14.3		108		400		77.1		60.8		50	0.65	70		3
6100-10		64.9		50.3		74		1.59		12.8		115		400		78.1		61.0		33	0.65	80		5
6100-11		65.1		53.5		88		1.62		13.1		108		400		77.4		61.1		27	0.68	85		3
6100-12		65.4		48.5		77		1.63		12.3		105		400		77.0		60.6		33	0.65	90		2
6100-13		64.7		55.2		86		1.63		13.3		103		400		77.8		60.9		60	0.63	75		1
6100-15		65.1		50.3		80		1.66		12.2		110		400		74.5		57.1		27	0.66	90		1
6100-16		64.3		55.2		90		1.79		14.0		115		400		76.9		60.1		47	0.72	80		3
6100-17		65.7		58.1		89		1.69		13.4		118		400		76.0		59.1		30	0.67	85		2
6100-18		65.5		54.9		89		1.65		13.1		111		400		75.5		58.1		37	0.66	80		2
6100-19		64.0		62.9		93		1.66		13.8		109		400		77.2		62.1		13	0.71	80		5
6100-20		63.0		56.5		85		1.53		12.1		114		400		76.8		60.6		40	0.66	80		4
6100-21		65.5		59.9		89		1.42		12.4		112		400		78.0		57.0		37	0.57	75		2
6100-22		65.2		63.7		96		1.65		13.8		114		400		77.9		62.5		27	0.67	80		4
6100-23		65.0		60.2		90		1.68		13.5		120		400		78.8		61.7		30	0.72	75		3
6100-25		65.0		55.6		84		1.61		12.7		115		400		77.3		60.1		37	0.64	85		2
6100-27		63.5		49.5		77		1.68		12.6		114		400		77.0		58.1		47	0.67	85		1
6100-28		64.6		57.1		87		1.74		12.9		114		400		74.3		62.0		27	0.74	75		4
6100-29		64.8		55.2		87		1.68		13.7		108		400		78.4		62.0		17	0.69	75		1
6100-30		65.3		51.8		85		1.60		13.5		109		400		77.5		59.9		27	0.63	75		1
6100-31		64.2		46.1		72		1.53		12.3		111		400		77.9		57.5		10	0.63	80		2
6100-32		65.4		43.3		63		1.53		12.2		113		400		78.4		58.7		13	0.66	85		2
6100-33		64.9		45.2		76		1.62		13.2		109		400		78.1		58.9		23	0.69	95		3
6100-35		64.0		46.3		73		1.56		12.9		109		400		79.7		62.3		10	0.70	80		3
6100-36		63.5		53.2		87		1.65		13.5		116		400		79.2		58.4		20	0.70	75		2
6100-37		65.1		61.0		93		1.70		14.3		117		400		77.7		61.1		47	0.67	75		1
6100-38		64.7		48.8		76		1.70		13.3		114		400		77.7		57.9		20	0.68	70		1
6100-39		64.9		43.5		67		1.67		12.4		104		400		77.3		58.4		10	0.63	70		3
6100-40		65.8		53.8		84		1.62		13.3		117		400		76.8		59.1		63	0.63	80		1
6100-42		65.0		55.9		90		1.55		12.6		110		400		79.6		62.5		43	0.63	80		1
6100-43		65.0		45.2		71		1.52		12.1		105		400		77.7		59.3		27	0.69	95		1
6100-44		64.5		54.1		80		1.52		12.7		119		400		59.3		63.2		20	0.67	75		4
6100-45		64.4		54.6		83		1.59		13.4		119		400		79.8		62.7		30	0.66	70		3
6100-46		64.1		58.1		88		1.70		12.3		114		400		79.2		62.3		10	0.69	65		4
6100-48		63.5		51.0		82		1.52		13.1		117		400		79.1		63.7		37	0.63	75		3
6100-50		63.1		54.6		77		1.58		13.0		114		400		79.3		63.9		47	0.69	60		3

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

TABLE 14 (Cont.)

-----VARIETY-----										-----DEFICIENCIES-----																					
SEMIO		VIS		COOK		FIRM-		SCORE		TW		KW		SM		WP		TX		SX		DU		SK		SP		VI		FR	
PRO		COL		WT		NESS		RES		***		G.		G.		G.		G.		G.		G.		G.		G.		G.		G.	
STD		%		G.		G.		G.		G.		G.		G.		G.		G.		G.		G.		G.		G.		G.		G.	
1986 N.D.		STANDARD		S		13.1		10.0		31.5		5.64		6.5		4															
6011-1		11.5		9.5		33.2		4.75		6.4		1																			
6100-2		11.5		10.0		31.8		5.96		6.4		1																			
6100-3		11.8		10.0		31.8		5.8		1																					
6100-4		10.4		10.0		31.8		5.57		5.4		1																			
6100-5		11.2		10.0		31.9		5.77		5.9		1																			
6100-6		11.7		9.5		31.6		6.35		6.0		1																			
6100-7		12.0		9.5		31.4		6.37		5.0		1																			
6100-10		11.0		10.0		31.1		5.38		5.6		1																			
6100-11		11.3		9.5		32.4		5.16		5.6		1																			
6100-12		10.5		10.0		32.1		4.54		6.4		1																			
6100-13		11.2		9.5		31.7		5.10		6.4		1																			
6100-15		10.2		10.0		32.4		4.67		5.2		1																			
6100-16		12.2		10.0		31.5		5.25		5.7		1																			
6100-17		11.8		10.0		31.4		5.46		6.3		1																			
6100-18		11.2		10.0		31.9		5.16		6.8		1																			
6100-19		12.0		10.0		32.8		5.23		6.7		1																			
6100-20		10.6		10.0		33.5		4.58		6.0		1																			
6100-21		10.4		10.0		31.9		5.05		7.6		1																			
6100-22		11.9		10.0		32.2		5.36		6.4		1																			
6100-23		11.7		10.0		31.7		5.10		6.9		1																			
6100-25		11.0		10.0		32.8		5.18		6.3		1																			
6100-27		11.0		10.0		33.2		5.72		6.5		1																			
6100-28		11.5		10.0		31.7		6.35		6.8		1																			
6100-29		11.8		10.0		32.5		5.90		6.6		1																			
6100-30		11.7		10.0		31.9		6.65		6.6		1																			
6100-31		10.4		10.0		32.7		5.83		6.7		1																			
6100-32		10.4		10.0		31.4		6.57		6.9		1																			
6100-33		11.3		10.0		32.1		5.85		6.6		1																			
6100-35		11.1		10.0		32.5		5.70		6.5		1																			
6100-36		11.5		10.5		31.7		5.77		6.7		1																			
6100-37		12.0		9.5		32.3		5.38		6.7		1																			
6100-38		11.5		10.0		32.3		5.77		6.7		1																			
6100-39		11.0		10.0		33.4		5.03		6.7		1																			
6100-40		11.1		10.5		33.7		5.18		7.0		1																			
6100-42		10.7		9.5		31.8		6.24		6.9		1																			
6100-43		10.7		10.0		31.5		5.81		7.5		1																			
6100-44		11.6		10.0		31.7		5.66		7.1		1																			
6100-45		11.8		9.5		31.6		5.66		7.3		1																			
6100-46		11.0		9.5		31.4		5.44		8.0		1																			
6100-48		11.8		10.0		31.3		5.94		6.7		1																			
6100-50		11.5		9.0		31.0		5.88		7.3		1																			

DEFICIENCIES

AVG OF STANDARDS 63.6 46.7 2 13.9 81.6 61.9 95 37 13.1 10.0 5.64

MINOR FAULTING VALUES 61.4 44.6 7 12.5 79.1 58.9 85 47 11.5 9.0 4.14

MAJOR FAULTING VALUES 60.5 41.6 12 11.5 78.1 57.9 80 52 11.0 8.5 3.39

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

TABLE 15

VARIETY	STANDARD	TEST	1000		SIZING		WHT		HARD- NESS	FALL NO SEC	TOTL		SEMO EXTR %	SPK ASH %	SEMO DUST COLOR	MIXO SCORE
			K.WT G.	G.	LG %	SM %	WHT %	ASH %			PRO %	EXTR %				
1986 N.D.	S	63.6	46.7	75	2	.	13.9	72	400	81.6	61.9	37	0.73	95	5	
6101-2		63.0	45.7	46	1	1.55	12.9	115	400	78.8	62.8	13	0.71	85	4	
6101-3		63.1	50.0	77	1	1.50	13.7	123	400	79.5	62.4	40	0.68	70	3	
6101-7		62.2	43.7	58	2	1.59	13.5	115	400	81.5	65.7	23	0.72	70	3	
6101-8		62.6	48.8	67	1	1.49	12.8	120	400	77.5	61.9	27	0.67	70	4	
6101-9		63.2	49.5	74	1	1.64	13.5	115	400	78.6	62.8	37	0.67	70	3	
6101-11		61.2	51.3	75	1	1.75	13.1	122	400	78.8	62.4	40	0.76	65	2	
6101-12		63.8	49.0	73	1	1.67	14.0	113	400	78.4	59.7	17	0.71	70	3	
6101-16		61.4	53.2	75	2	1.65	13.3	131	400	78.3	60.4	17	0.70	70	3	
6101-18		63.4	40.8	57	2	1.67	14.1	104	400	79.1	59.2	13	0.71	75	1	
6101-19		64.2	42.4	54	2	1.59	12.2	105	400	80.7	61.6	10	0.63	75	2	
6101-20		64.1	42.7	63	2	1.66	12.4	107	400	78.4	60.6	17	0.67	75	2	
6101-21		65.4	47.1	81	1	1.55	12.1	100	400	77.9	60.4	17	0.58	75	2	
6101-23		64.4	40.0	40	3	1.58	12.0	98	400	78.5	58.2	10	0.63	70	1	
6101-24		63.8	46.1	59	2	1.63	11.9	97	400	78.4	60.0	3	0.66	70	2	
6101-25		62.5	40.2	42	2	1.53	13.1	107	400	79.1	58.3	13	0.64	80	1	
6101-26		63.6	35.5	39	3	1.58	12.7	105	400	79.5	57.9	13	0.66	75	4	
6101-27		63.6	40.0	55	2	1.59	13.2	111	400	78.7	57.7	13	0.69	85	4	
6101-28		64.5	42.7	70	1	1.64	14.2	107	400	78.4	58.0	7	0.68	80	2	
6101-29		64.2	43.3	63	1	1.64	13.5	104	400	78.3	59.8	0	0.67	75	3	
6101-30		62.9	41.8	49	1	1.73	13.8	102	400	77.4	57.7	3	0.68	85	4	
6101-31		63.3	41.0	60	2	1.58	14.4	107	400	77.6	55.8	13	0.75	85	1	
6101-32		62.8	49.5	73	2	1.68	12.6	108	400	77.6	61.3	53	0.72	90	3	

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=PRELIMINARY

TABLE 15 (Cont.)

-----VARIETY-----										-----DEFICIENCIES-----									
STANDARD	S	SEMO	PRO	VIS	COOK	FIRM-	SCORE	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR	
		%		COL	WT	NESS	RES												
					G.		G.												
1986 N.D.																			
6101-2	13.1	10.0	31.5	5.64	6.5	4													
6101-3	11.5	10.0	32.2	5.64	6.8	1													
6101-7	12.4	9.5	31.9	6.29	6.5	1													
6101-8	12.0	9.5	32.0	5.94	7.0	1													
6101-9	11.8	9.5	31.3	6.16	7.1	1													
6101-11	12.1	8.5	32.2	6.03	7.3	1													
6101-12	11.9	9.0	31.4	5.90	6.6	1													
6101-16	12.3	8.5	32.3	5.51	7.0	1													
6101-18	12.0	9.5	32.3	5.88	6.7	1													
6101-19	12.3	10.0	33.7	4.75	7.1	1													
6101-20	10.7	10.0	32.7	5.29	7.4	1													
6101-21	10.4	10.5	32.4	5.21	6.6	1													
6101-23	10.2	10.0	31.6	6.22	5.9	1													
6101-24	10.3	10.0	33.7	4.56	6.4	1													
6101-25	10.4	10.0	33.4	4.64	7.2	1													
6101-26	10.9	10.5	32.4	4.60	6.7	1													
6101-27	11.5	10.5	33.1	5.12	6.2	1													
6101-28	11.8	10.0	31.7	5.53	6.5	1													
6101-29	12.2	10.0	33.3	5.01	6.0	1													
6101-30	12.0	10.0	32.9	6.07	5.9	1													
6101-31	12.4	10.0	31.6	6.61	5.9	1													
6101-32	10.1	.	.	.	.	1													
	11.4	10.5	31.5	6.16	5.9	1													

DEFICIENCIES

AVG OF STANDARDS 63.6 46.7 2 13.9 81.6 61.9 95 37 13.1 10.0 5.64

MINOR FAULTING VALUES 61.4 44.6 7 12.5 79.1 58.9 85 47 11.5 9.0 4.14

MAJOR FAULTING VALUES 60.5 41.6 12 11.5 78.1 57.9 80 52 11.0 8.5 3.39

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=ADVANCED

TABLE 16

-----VARIETY-----		TEST		1000		SIZING		WHT		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST		MIXO	
		WT	#/BU	K.WT	G.	LG	%	SM	%	ASH	%	PRO	%	NESS	NO	EXTR	%	EXTR	%	SPK	ASH	COLOR	SCORE		
ALDURA	S	65.0	48.8	78	0	1.54	11.8	99	400	78.9	61.8	90	0.61	95	4									4	
		65.5	48.8	79	1	1.52	12.9	92	400	78.6	61.6	47	0.59	90	4									4	
		65.2	51.0	79	1	1.55	12.0	98	400	78.1	61.4	93	0.56	90	3									3	
		64.3	54.6	86	0	1.58	12.4	98	400	78.0	63.0	47	0.68	85	7									7	
		66.3	48.1	75	1	1.69	13.2	100	400	76.2	58.8	67	0.60	85	6									6	
		65.3	50.0	85	0	1.49	11.8	100	400	77.6	62.4	77	0.61	95	6									6	
		65.5	57.8	90	1	1.44	12.4	94	400	77.7	63.6	99	0.53	85	3									3	
		65.8	58.8	93	0	1.45	12.8	104	400	79.1	64.5	63	0.60	80	7									7	
		65.9	51.8	83	0	1.54	12.7	106	400	78.4	61.9	27	0.65	90	3									3	
		65.6	57.3	89	0	1.48	12.2	116	400	77.7	60.5	33	0.61	85	5									5	
WESTBRED TURBO	S	64.0	54.6	90	0	1.69	14.3	117	400	76.0	59.7	30	0.62	95	8									8	
		66.4	55.6	85	1	1.52	12.4	91	400	77.5	61.5	60	0.55	80	4									4	
		66.3	45.5	80	0	1.54	12.1	109	400	77.7	61.3	67	0.62	95	7									7	
		65.7	54.3	86	0	1.53	12.0	103	400	78.6	63.0	67	0.59	65	2									2	
		65.9	49.0	80	0	1.49	13.7	101	400	77.4	60.5	53	0.61	100	8									8	
		63.3	57.1	92	0	1.69	14.0	93	400	79.0	62.1	70	0.76	90	8									8	
		65.3	49.8	78	0	1.74	12.5	93	400	77.7	61.4	53	0.67	95	6									6	
		64.9	54.9	88	0	1.50	13.2	106	400	77.7	62.3	47	0.65	90	2									2	
		65.3	48.1	78	0	1.62	12.8	118	400	77.0	60.2	30	0.58	75	6									6	
		64.9	45.7	70	1	1.60	13.7	110	400	76.7	59.9	57	0.63	85	2										2
UC 707		65.2	43.9	72	0	1.66	13.3	117	400	77.1	59.9	60	0.66	85	4									4	
		65.1	44.2	61	1	1.64	13.1	107	400	74.1	58.0	99	0.64	95	3									3	
		65.2	46.9	76	1	1.68	12.6	92	400	76.0	59.1	80	0.61	105	2									2	
		64.9	56.5	91	0	1.55	13.2	106	400	77.3	61.1	60	0.70	100	6									6	
		65.3	50.0	76	1	1.63	13.0	102	400	76.7	60.4	63	0.64	95	5									5	
		67.0	50.3	83	0	1.53	11.2	102	400	76.9	61.8	40	0.60	85	4									4	



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-CALIFORNIA STATION-IMPERIAL VALLEY NURSERY-ADVANCED

TABLE 16 (Cont.)

-----VARIETY-----				STD	SEMO PRO	VIS COL	COOK WT	FIRM- NESS	SCORE ***	-----DEFICIENCIES-----										
										TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
										G.										
ALDURA	S	11.1	9.5	30.8	4.38	7.3	1			MI										
FRIGATE 'S'		11.9	9.5	31.0	4.49	7.2	4			MI										
GEDIZ 1		10.7	9.5	31.6	4.17	7.6	1			MI										
MEXICALI	S	11.1	8.5	30.5	5.31	7.5	2			MI										
MODOC		11.9	9.0	30.0	5.98	7.5	4			MI										
ROKEL 'S'		10.8	8.5	31.1	5.12	7.8	1			MI										
STIFFTAIL 3		10.9	8.0	32.3	4.00	7.3	1			MI										
STIFFTAIL 4		11.4	8.0	30.1	5.57	7.5	1			MI										
WAHA 'S'		11.6	9.5	31.6	4.45	6.9	4													
WESTBRED TURBO		10.7	9.0	31.6	4.62	7.5	1			MI										
WESTBRED 881	S	12.3	10.0	31.2	5.94	7.6	4													
YAVAROS		10.8	8.5	30.4	5.31	7.6	1			MI										
CD 25126		10.9	9.5	31.4	5.55	6.9	1			MI										
L-0162		10.8	8.0	32.5	3.89	8.2	1			MI										
P883-2		12.2	10.0	29.6	6.57	6.8	4			MI										
P883-15		12.7	9.5	31.8	5.72	7.2	4													
P884-32		11.1	9.5	32.2	5.14	7.4	2			MI										
UC 640		11.8	9.0	33.1	4.43	7.4	4			MI										
UC 707		11.9	8.0	30.6	4.77	7.0	1			MI										
UC 708		11.8	8.5	32.7	3.87	6.5	3			MI										
UC 709		11.9	9.5	32.1	4.47	7.1	3			MJ										
UC 710		11.8	9.5	31.1	5.25	7.2	1													
UC 711		10.6	10.0	32.5	4.23	7.6	1			MJ										
UC 712		11.7	9.5	31.3	5.31	6.7	4			MJ										
UC 713		11.5	9.5	31.8	5.42	6.4	3													
UC 714		10.4	9.0	32.1	4.77	7.2	1			MI										

DEFICIENCIES

	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
AVG OF STANDARDS	64.4	52.7	0	12.8	77.6	61.5	92	56	11.5	9.3	5.21
MINOR FAULTING VALUES	62.2	50.6	5	12.5	75.1	58.5	82	66	11.5	8.3	3.71
MAJOR FAULTING VALUES	61.3	47.6	10	11.5	74.1	57.5	77	71	11.0	7.8	2.96

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=ADVANCED

TABLE 17

VARIETY		STD		TEST		1000		SIZING		WHT		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST		MIXO					
				#/BU		K.WT		LG		SM		ASH		PRO		NESS		NO		EXTR		EXTR		SPK		ASH		COLOR		SCORE	
						G.		%		%		%		%		SEC		%		%		%		%							
S	ALDURA	65.2	49.0	76	0	1.60	13.4	108	400	77.1	59.5	57	0.58	90	3																
	ALTAR	66.9	54.9	84	1	1.56	12.8	105	400	77.3	59.9	23	0.56	85	5																
	GEM	66.1	59.2	89	1	1.46	12.7	115	400	76.7	60.7	33	0.52	70	2																
S	MEXICALI 75	64.1	59.2	87	1	1.52	13.7	109	400	78.1	61.7	13	0.58	80	6																
	WESTBRED TURBO	65.4	56.5	89	1	1.41	13.3	107	400	75.5	58.7	17	0.53	85	5																
S	WESTBRED 881	64.2	56.2	89	0	1.58	15.1	100	400	75.1	59.1	33	0.60	95	8																
	YAVAROS	66.6	58.1	88	1	1.39	12.5	92	400	77.7	60.8	13	0.54	70	3																
D	46	65.4	49.8	82	2	1.65	13.6	107	400	77.6	61.4	13	0.66	85	7																
	P883-2	64.5	48.3	77	1	1.65	14.9	102	400	76.3	59.1	13	0.60	95	8																
P	P883-15	62.7	55.9	89	0	1.77	15.1	103	400	77.0	58.7	33	0.70	90	7																
	UC 169	64.4	55.2	85	1	1.48	13.1	110	400	77.3	61.9	50	0.60	80	6																
UC	496	66.7	56.5	86	1	1.53	12.7	105	400	77.4	60.4	20	0.54	75	2																
	499	64.9	51.8	83	2	1.52	13.4	101	400	77.2	61.3	37	0.56	85	4																
UC	606	65.6	51.0	81	1	1.59	14.3	113	400	77.6	60.8	10	0.60	80	3																
	640	65.5	56.5	89	0	1.60	14.1	106	400	77.1	61.0	27	0.60	85	2																
UC	642	64.7	52.1	81	1	1.58	13.7	105	400	76.2	58.2	17	0.53	85	2																
	646	65.2	60.6	91	1	1.50	14.1	107	400	76.8	59.4	53	0.53	80	2																
UC	647	65.8	61.7	93	0	1.46	14.0	113	400	77.8	59.8	30	0.57	75	4																
	685	65.1	56.2	86	0	1.51	13.7	115	400	77.6	60.1	57	0.58	65	1																
UC	686	66.2	45.7	80	0	1.45	13.3	109	400	77.7	61.1	17	0.57	95	5																
	714	65.4	52.6	86	0	1.54	13.7	110	400	76.6	57.8	23	0.54	75	4																
W	6	66.9	54.3	86	1	1.55	13.1	112	400	76.6	62.1	30	0.59	80	4																
	583	63.9	49.8	77	2	1.50	14.2	110	400	76.5	60.1	57	0.58	100	3																
W	595	65.7	59.5	89	0	1.55	14.0	109	400	76.2	60.2	43	0.58	75	3																

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=ADVANCED

TABLE 17 (Cont.)

-----VARIETY-----				STD	SEMO PRO	VIS COL	COOK WT	FIRM- NESS	RES G.	SCORE ***	-----DEFICIENCIES-----											
											TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR	
ALDURA	S	11.7	9.5	32.2	5.29	6.6	2															
ALTAR		11.3	9.0	32.1	5.44	5.4	3															
GEM		11.1	8.5	31.4	5.24	6.3	1															
MEXICALI 75	S	11.8	8.5	30.9	5.98	6.3	4															
WESTBRED TURBO		11.4	9.0	31.3	5.16	6.6	3															
WESTBRED 881	S	13.3	10.0	30.3	7.45	6.0	4															
YAVAROS		10.7	8.5	31.6	5.64	6.6	1															
D 46		12.0	9.0	31.6	6.22	6.3	4															
P883-2		13.2	9.5	30.8	6.74	6.2	3															
P883-15		13.6	9.5	32.3	6.22	6.0	4															
UC 169		11.2	9.0	31.3	5.66	6.8	2															
UC 496		11.0	8.5	32.9	4.77	8.1	1															
UC 499		11.9	9.5	32.6	5.34	6.7	4															
UC 606		12.6	9.5	32.0	5.49	5.8	4															
UC 640		12.6	9.5	32.8	5.49	7.0	4															
UC 642		11.9	9.0	32.7	5.96	7.0	4															
UC 646		12.1	8.5	33.0	5.18	6.3	3															
UC 647		12.1	8.5	32.0	7.15	6.6	2															
UC 685		11.7	8.0	32.5	4.45	6.5	1															
UC 686		11.3	10.0	31.2	5.72	6.6	2															
UC 714		11.7	9.5	31.8	5.83	6.5	2															
W 6		11.5	9.0	31.8	5.62	6.9	3															
W 583		12.5	10.0	32.9	5.23	6.2	3															
W 595		12.3	9.5	32.4	5.31	6.3	2															

DEFICIENCIES

	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
AVG OF STANDARDS	64.5	54.8	0	14.1	76.8	60.1	88	34	12.3	9.3	6.24
MINOR FAULTING VALUES	62.3	52.7	5	12.5	74.3	57.1	78	44	11.5	8.3	4.74
MAJOR FAULTING VALUES	61.4	49.7	10	11.5	73.3	56.1	73	49	11.0	7.8	3.99

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=ADVANCED

TABLE 18

VARIETY	STD	TEST		1000		SIZING		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST		MIXO
		WT	#/BU	K.WT	G.	LG	%	ASH	%	NESS	SEC	NO	SEC	EXTR	%	EXTR	%	SPK	ASH	COLOR	SCORE	
ALDURA	S	65.0		51.0	81	1		1.63	13.6	126		400		78.9		60.1		20	0.62	90		2
MEXICALI	S	64.4		58.1	86	1		1.55	12.8	108		400		78.3		62.5		23	0.64	80		5
MODOC		64.4		47.1	76	3		1.64	13.0	118		400		78.7		57.3		10	0.60	80		3
WESTBRED 881	S	64.1		56.2	88	1		1.57	14.2	115		400		75.9		58.2		27	0.62	90		5
YAVAROS		66.1		61.0	89	1		1.47	12.8	108		400		77.2		60.8		37	0.58	70		2
520/2		64.7		53.2	80	1		1.62	13.5	116		400		78.6		60.8		30	0.62	75		3
520/3		66.0		57.1	89	2		1.64	14.1	114		400		78.0		60.6		40	0.65	65		3
520/6		65.9		51.5	80	1		1.61	13.4	110		400		78.4		60.3		17	0.62	85		2
520/9		65.0		48.3	74	2		1.60	12.6	102		400		77.7		60.8		13	0.64	85		2
520/18		65.4		50.0	75	2		1.68	12.8	107		400		78.9		62.6		43	0.65	75		4
520/19		66.7		52.9	87	2		1.47	12.7	106		400		77.2		60.8		10	0.64	60		3
520/28		65.7		49.3	83	1		1.60	13.8	112		400		77.3		59.4		57	0.63	85		3
520/29		65.3		44.1	72	1		1.70	13.9	104		400		75.8		56.9		37	0.61	90		3
520/32		65.2		45.2	74	2		1.72	14.0	111		400		75.2		56.3		53	0.62	95		3
520/36		65.8		53.8	84	1		1.55	12.8	105		400		77.9		61.5		23	0.67	90		2
520/43		65.9		50.0	81	3		1.66	14.4	115		400		76.9		59.6		53	0.65	95		2
520/46		65.7		45.7	75	1		1.63	13.9	114		400		75.6		58.5		13	0.60	95		2
520/51		64.7		46.5	78	2		1.63	13.4	102		400		75.0		57.7		53	0.60	95		2
520/53		65.7		43.9	71	2		1.65	14.0	111		400		75.7		58.1		27	0.63	80		1
520/55		64.9		49.8	83	1		1.66	14.0	110		400		76.9		61.3		23	0.64	80		3
520/62		66.1		52.9	86	2		1.59	13.4	100		400		78.9		63.0		43	0.66	85		3
521/4		65.6		51.0	84	2		1.68	14.0	116		400		75.8		59.0		27	0.60	80		4
521/8		64.6		42.0	62	3		1.68	12.7	107		400		77.6		60.0		27	0.65	65		2
521/13		65.0		45.7	72	2		1.66	14.1	100		400		76.0		58.0		10	0.59	75		2
522/1		65.3		49.3	78	2		1.61	11.3	92		400		76.9		60.8		13	0.65	80		2
522/6		66.1		50.8	84	1		1.58	13.6	87		400		75.6		59.8		73	0.59	70		3
522/17		64.6		51.5	81	1		1.63	13.8	107		400		77.6		61.0		23	0.60	90		2
522/27		65.3		43.9	63	2		1.73	14.0	114		400		77.3		60.0		30	0.62	80		1
522/38		65.6		49.0	67	2		1.60	12.1	105		400		76.9		59.8		17	0.60	75		1
524/24		65.6		42.6	57	2		1.64	12.7	104		400		76.8		59.9		23	0.60	90		2
524/26		65.9		55.6	84	1		1.64	13.7	119		400		75.5		59.5		20	0.57	85		3
524/39		65.7		48.1	77	0		1.69	13.8	108		400		75.5		59.0		27	0.63	95		1
524/55		64.1		52.1	76	1		1.67	13.4	108		400		78.0		61.9		57	0.69	85		3
524/87		64.8		57.1	88	2		1.75	14.1	98		400		75.9		59.9		30	0.62	85		2
572/24		66.0		52.1	82	2		1.77	13.0	111		400		77.7		61.2		30	0.62	75		3
572/27		66.6		50.8	82	2		1.66	12.7	104		400		78.0		62.5		27	0.61	80		4

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=ADVANCED

TABLE 18 (Cont.)

-----VARIETY-----										STD	SEMO		VIS	COOK	FIRM-		SCORE		-----DEFICIENCIES-----																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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ALDURA	S	12.2	10.0	31.5	4.64	7.7	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</

DEFICIENCIES

TW KW SM WP TX SX DU SK SP VI FR  
 AVG OF STANDARDS 64.5 55.1 1 13.5 77.7 60.3 87 23 12.0 10.0 5.36  
 MINOR FAULTING VALUES 62.3 53.0 6 12.5 75.2 57.3 77 33 11.5 9.0 3.86  
 MAJOR FAULTING VALUES 61.4 50.0 11 11.5 74.2 56.3 72 38 11.0 8.5 3.11

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=KINGS CO. NURSERY=ADVANCED

TABLE 19

-----VARIETY-----		TEST		1000		SIZING		WHT		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST		MIXO	
WT	#/BU	K.WT	G.	LG	%	SM	%	ASH	%	PRO	%	NESS	SEC	EXTR	%	EXTR	%	SPK	ASH	%	COLOR	SCORE			
S	ALDURA	62.9	49.0	72	0	1.53	13.5	125	400	78.0	60.5	40	0.63	100	5										
	ALTAR 84	64.5	44.1	72	2	1.53	12.0	118	400	78.6	61.9	43	0.67	85	7										
	FRIGATE 'S'	62.8	45.5	66	2	1.55	13.8	125	400	77.6	60.2	20	0.63	90	4										
	GEDIZ 1	63.8	51.8	77	2	1.41	12.5	123	400	76.4	59.1	43	0.56	90	5										
S	MEXICALI	62.1	50.5	77	2	1.57	12.6	131	400	76.7	60.8	50	0.70	90	7										
	MODOC	64.2	47.1	74	1	1.53	13.6	135	400	74.4	56.7	47	0.65	90	7										
	ROKEL 'S'	62.2	42.6	66	2	1.53	12.6	123	400	76.3	59.4	50	0.68	95	6										
	STIFFTAIL 3	62.5	56.8	88	1	1.49	14.1	127	400	76.5	58.8	43	0.64	90	5										
S	STIFFTAIL 4	63.1	55.6	86	2	1.50	14.0	127	400	76.8	60.5	50	0.66	80	8										
	WAHA 'S'	63.7	48.3	74	0	1.44	12.9	118	400	77.2	60.2	27	0.68	90	6										
	WESTBRED TURBO	63.2	51.0	82	2	1.41	12.8	121	400	76.4	59.3	37	0.56	90	7										
	WESTBRED 881	63.2	56.8	90	0	1.48	13.6	126	400	75.3	58.7	37	0.64	95	8										
S	YAVAROS	64.5	54.3	81	1	1.44	12.7	137	400	77.2	60.7	47	0.60	85	5										
	CD 25126	64.4	46.3	81	2	1.50	13.0	119	400	77.0	59.1	47	0.63	100	8										
	L-0162	62.5	49.0	67	2	1.54	13.7	113	400	78.5	62.1	57	0.67	70	3										
	P883-2	62.8	50.3	83	1	1.64	14.7	123	400	77.6	58.7	43	0.73	95	8										
	P883-15	61.6	57.1	90	1	1.71	14.3	114	400	78.3	60.2	57	0.73	90	7										
	P884-32	63.0	44.4	58	1	1.66	13.0	117	400	78.2	61.0	40	0.67	100	7										
	UC 640	62.4	56.8	88	0	1.65	14.6	131	400	77.7	60.3	37	0.67	95	3										
	UC 707	64.1	49.3	74	1	1.59	13.0	125	400	77.0	59.4	27	0.61	75	7										
	UC 708	62.3	42.6	50	2	1.62	13.7	130	400	77.6	60.3	60	0.69	85	3										
	UC 709	62.8	40.2	46	1	1.55	13.2	122	400	78.1	59.7	90	0.68	90	6										
	UC 710	64.2	46.7	67	1	1.60	13.3	121	400	76.7	58.8	53	0.65	95	6										
	UC 711	63.7	47.6	71	1	1.67	13.0	135	400	76.4	59.2	30	0.65	110	3										
	UC 712	62.3	51.8	84	1	1.62	13.6	133	400	77.4	60.5	43	0.71	100	7										
	UC 713	63.4	47.6	68	2	1.49	12.9	127	400	76.9	59.8	73	0.64	100	6										



TABLE 19 (Cont.)

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=KINGS CO. NURSERY=ADVANCED

-----VARIETY-----										STD	SENO PRO %	VIS	COOK	FIRM- NESS	RES G.	SCORE ***	-----DEFICIENCIES-----													
												COL	WT	G.			TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR			
ALDURA										S	11.7	10.0	31.3	5.25	6.8	4		MI												
ALTAR 84											10.6	9.5	31.2	4.90	7.5	1		MJ												
FRIGATE 'S'											11.8	9.5	31.2	4.47	6.9	3		MJ		MI										
GEDIZ 1											10.6	9.5	31.9	4.51	6.9	1				MI										
MEXICALI										S	11.0	9.0	30.6	5.23	6.8	2														
MODOC											11.4	9.5	29.0	5.42	6.3	2		MI												
ROKEL 'S'											11.2	9.5	31.2	4.92	6.2	2		MJ												
STIFFTAIL 3											12.0	8.5	30.6	5.38	6.1	2														
STIFFTAIL 4											12.2	8.5	29.3	5.62	6.3	1														
WAHA 'S'											11.3	9.5	31.1	4.95	6.6	3		MI												
WESTBRED TURBO											11.1	9.0	30.5	5.51	6.4	3														
WESTBRED 881										S	12.1	9.5	30.1	6.35	7.2	4														
YAVAROS											10.8	8.5	29.9	5.79	6.9	1														
CD 25126											11.2	9.5	28.2	6.09	5.7	2		MJ												
L-0162											12.0	8.0	30.2	4.86	6.1	1		MI												
P883-2											12.7	9.5	28.9	6.39	5.9	4														
P883-15											12.6	9.5	29.6	6.26	6.0	4														
P884-32											11.1	10.0	29.9	5.77	6.0	2														
UC 640											12.7	9.0	31.6	5.12	6.4	4		MJ												
UC 707											11.2	8.5	30.1	5.81	6.3	1		MI												
UC 708											11.9	9.5	32.5	4.43	6.0	1		MJ												
UC 709											11.5	9.5	30.8	5.55	5.8	1		MJ												
UC 710											11.9	9.5	30.2	6.22	6.4	3		MJ												
UC 711											11.5	10.0	31.0	5.08	6.5	3		MI												
UC 712											11.8	10.0	30.1	6.00	6.1	4														
UC 713											11.3	9.5	29.9	5.53	6.0	2		MI												

## DEFICIENCIES

AVG OF STANDARDS 62.7 52.1 1 13.2 76.7 60.0 95 42 11.6 9.5 5.61  
MINOR FAULTING VALUES 60.5 50.0 6 12.5 74.2 57.0 85 52 11.5 8.5 4.11  
MAJOR FAULTING VALUES 59.6 47.0 11 11.5 73.2 56.0 80 57 11.0 8.0 3.36

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 20

-----VARIETY-----	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	WHT SM %	WHT ASH %	HARD- NESS	FALL NO SEC	TOTL EXTR %	SEMO EXTR %	SPK	SEMO ASH %	DUST COLOR	MIXO SCORE	
ALDURA	S	64.6	56.8	91	0	1.56	9.8	102	400	78.6	59.7	23	0.70	90	3
ALTAR 84		66.7	54.6	86	0	1.45	9.5	135	400	78.3	60.9	33	0.62	85	6
FRIGATE 'S'		65.8	56.8	92	0	1.52	9.4	112	400	74.1	55.0	17	0.65	85	3
GEDIZ 1		65.5	57.3	86	1	1.56	10.4	122	400	76.9	59.6	47	0.61	85	4
MEXICALI	S	63.5	62.9	92	1	1.62	10.4	123	400	75.5	57.2	47	0.72	80	7
MODOC		65.4	54.6	90	0	1.71	11.7	130	400	80.4	58.2	43	0.69	85	6
ROKEL 'S'		64.3	62.9	91	1	1.56	10.5	118	400	76.5	60.9	43	0.66	85	5
STIFFTAIL 3		64.5	65.4	94	0	1.47	9.2	130	400	76.5	58.8	33	0.62	80	4
STIFFTAIL 4		65.6	66.7	96	0	1.39	8.9	132	400	77.2	60.2	20	0.63	75	8
WAHA 'S'		65.7	56.5	90	0	1.51	10.8	130	400	76.4	59.2	20	0.63	85	4
WESTBRED TURBO		64.3	62.5	96	0	1.42	9.6	131	400	76.9	58.3	37	0.60	85	7
WESTBRED 881	S	63.3	62.5	96	0	1.75	13.2	112	400	76.8	59.6	73	0.67	90	8
YAVAROS		66.0	60.6	94	0	1.46	9.0	118	400	76.8	59.5	33	0.60	75	5
CD 25126		65.4	51.3	91	1	1.45	8.4	136	400	75.3	56.4	33	0.69	90	5
L-0162		64.8	61.3	91	1	1.52	11.4	137	400	78.4	60.8	53	0.64	65	3
P883-2		64.4	57.8	95	0	1.68	11.2	127	400	76.7	58.0	40	0.68	90	8
P883-15		62.8	60.2	95	0	1.73	9.7	130	400	78.5	58.2	37	0.78	90	7
P884-32		64.8	56.5	90	0	1.74	11.5	135	400	77.2	57.7	43	0.68	90	7
UC 640		64.0	65.4	95	0	1.67	12.6	140	400	77.1	57.8	53	0.70	85	3
UC 707		64.8	48.5	83	0	1.63	11.2	131	400	76.0	56.1	40	0.67	75	7
UC 708		64.9	50.0	90	1	1.67	12.3	147	400	77.1	59.0	23	0.68	75	3
UC 709		65.1	54.1	92	1	1.60	11.0	143	400	78.3	59.7	33	0.74	75	6
UC 710		64.5	48.8	81	0	1.65	11.3	137	400	75.3	55.6	63	0.70	90	5
UC 711		64.8	55.9	91	0	1.76	11.8	141	400	74.9	56.9	40	0.70	95	3
UC 712		63.7	66.7	97	0	1.64	11.5	128	400	75.6	56.8	33	0.74	90	7
UC 713		64.8	61.0	91	1	1.62	11.1	125	400	76.1	57.1	53	0.68	90	5

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 20 (Cont.)

-----VARIETY-----										-----DEFICIENCIES-----									
STD	SEM	PRO	VIS	COOK	FIRM-	RES	SCORE	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR	
%			COL	WT	NESS	G.	***												
S	8.9	9.5	31.7	4.23	7.7	1													
ALDURA																			
ALTAR 84	9.0	8.5	30.8	4.49	8.1	1													
FRIGATE 'S'	8.7	8.5	32.2	5.14	8.1	1													
GEDIZ 1	9.2	9.0	30.9	4.10	7.8	1													
MEXICALI	9.2	8.5	30.8	4.26	7.7	1													
MODOC	10.2	9.0	30.5	4.97	7.3	1													
ROKEL 'S'	9.8	8.5	30.9	4.56	7.4	1													
STIFFTAIL 3	8.6	8.0	31.7	4.28	7.7	1													
STIFFTAIL 4	8.3	9.5	30.8	4.56	8.1	1													
WAHA 'S'	9.8	8.5	32.1	4.23	8.2	1													
WESTBRED TURBO	9.0	8.5	30.7	4.41	7.9	1													
WESTBRED 881	11.4	9.5	29.1	5.53	7.6	2													
YAVAROS	8.5	8.5	30.9	4.21	8.0	1													
CD 25126	8.1	9.5	30.6	4.23	7.9	1													
L-0162	10.1	8.0	30.0	4.19	7.2	1													
P883-2	10.6	9.5	29.2	4.90	7.5	1													
P883-15	9.2	9.0	29.6	4.62	7.2	1													
P884-32	10.1	8.5	30.3	4.86	7.4	1													
UC 640	11.4	8.5	30.9	4.04	8.2	3													
UC 707	9.5	7.5	29.9	5.27	7.6	1													
UC 708	10.7	8.0	31.5	4.54	7.4	1													
UC 709	10.0	8.0	29.9	4.45	7.2	1													
UC 710	9.8	9.0	30.0	5.27	7.4	1													
UC 711	10.4	10.0	30.8	4.56	7.9	1													
UC 712	10.4	9.5	30.9	5.42	7.6	1													
UC 713	9.9	8.5	29.9	5.70	7.5	1													

DEFICIENCIES

TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
63.8	60.7	0	11.1	77.0	58.8	87	48	9.8	9.2	4.67
AVG OF STANDARDS										
61.6	58.6	5	12.5	74.5	55.8	77	58	11.5	8.2	3.17
MINOR FAULTING VALUES										
60.7	55.6	10	11.5	73.5	54.8	72	63	11.0	7.7	2.42
MAJOR FAULTING VALUES										

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 21

-----VARIETY-----																
TEST	WT	#/BU	1000	SIZING		WHT	WHT	PRO	HARD- NESS	FALL	TOTL	SEMO	SPK	SEMO	DUST	MIKO
				LG	SM											
STANDARD S	STANDARD S		G.	%	%	%	%	%	SEC	%	%	%	%	%	COLOR	
1986	59.0		39.7	42	4	1.80	13.7	101	400	76.6	57.4	27	0.69	90		5
620-2	66.2		61.3	94	1	1.61	11.6	125	400	78.0	58.7	10	0.69	65		4
620-8	66.0		52.1	88	0	1.71	10.2	112	400	76.0	56.1	23	0.69	80		3
620-9	66.1		57.1	90	0	1.49	8.3	96	400	73.9	56.4	23	0.60	75		2
620-11	63.8		62.1	93	0	1.70	9.1	98	400	73.4	57.4	37	0.65	75		3
620-16	65.3		56.8	92	0	1.54	9.8	113	400	77.9	58.7	37	0.62	85		2
620-17	64.7		54.3	91	0	1.65	12.1	118	400	74.2	54.5	40	0.67	80		3
620-18	65.1		49.3	83	0	1.68	11.7	116	400	77.0	57.4	23	0.62	70		1
620-19	65.4		48.8	83	0	1.78	11.9	116	400	75.3	55.6	30	0.69	85		3
620-20	64.8		46.1	73	0	1.67	11.2	108	400	76.0	57.1	47	0.70	80		2
620-21	63.7		49.0	88	0	1.80	13.5	116	400	75.2	53.9	40	0.55	95		3
620-24	64.8		48.1	71	1	1.55	9.5	98	400	71.5	52.0	40	0.61	70		1
620-25	64.4		53.5	90	1	1.62	12.1	124	400	76.5	56.6	23	0.64	65		2
620-26	65.3		44.6	82	1	1.78	12.7	116	400	76.3	55.7	23	0.71	90		1
620-27	65.0		51.8	90	0	1.77	12.4	118	400	75.7	56.7	17	0.68	95		3
620-28	65.1		51.0	89	0	1.84	12.4	120	400	76.4	57.2	30	0.72	95		3
620-30	65.3		50.8	88	0	1.76	12.3	110	400	75.5	56.7	67	0.71	70		2
620-31	64.5		55.9	93	0	1.73	12.0	116	400	77.4	58.3	50	0.70	80		3
620-33	66.3		52.9	88	1	1.64	11.1	109	400	77.2	58.5	37	0.71	85		3
620-34	64.0		64.1	97	0	1.73	13.4	123	400	76.9	59.4	30	0.71	75		3
620-37	64.3		41.7	60	1	1.65	12.0	111	400	77.1	57.5	10	0.66	75		3

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 21 (Cont.)

-----VARIETY-----				STD	SEMO	VIS	COOK	FIRM-	SCORE	-----DEFICIENCIES-----															
					PRO	COL	WT	NESS	RES	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR					
				%			G.		G.																
1986 N.D.	STANDARD S	13.1	9.5	28.7	5.62	7.0	4																		
620-2		10.5	10.0	29.6	6.03	7.4	1																		
620-8		9.3	10.5	30.5	5.18	7.5	1																		
620-9		8.2	11.0	31.5	4.38	8.0	1																		
620-11		8.8	11.0	31.4	4.60	8.0	1																		
620-16		9.1	10.5	32.2	4.62	8.0	1																		
620-17		10.8	10.5	31.9	5.10	7.7	1																		
620-18		10.0	10.0	33.3	4.36	8.3	1																		
620-19		10.7	10.0	30.8	4.92	8.0	1																		
620-20		10.1	10.5	30.9	5.38	7.6	1																		
620-21		12.2	10.0	30.9	5.77	7.2	3																		
620-24		9.3	10.5	32.5	4.36	7.4	1																		
620-25		10.7	9.0	31.4	5.08	7.3	1																		
620-26		11.5	10.0	31.3	5.23	7.3	3																		
620-27		11.2	10.0	31.2	5.88	7.6	2																		
620-28		11.0	10.0	30.4	6.26	7.9	1																		
620-30		10.8	9.5	30.9	4.38	7.9	1																		
620-31		10.7	10.5	29.8	5.68	7.9	1																		
620-33		10.4	10.0	30.2	5.44	7.4	1																		
620-34		12.1	10.0	30.5	5.98	7.2	1																		
620-37		10.8	9.5	31.0	4.45	7.8	1																		

DEFICIENCIES

	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
AVG OF STANDARDS	59.0	39.7	4	13.7	76.6	57.4	90	27	13.1	9.5	5.62
MINOR FAULTING VALUES	56.8	37.6	9	12.5	74.1	54.4	80	37	11.5	8.5	4.12
MAJOR FAULTING VALUES	55.9	34.6	14	11.5	73.1	53.4	75	42	11.0	8.0	3.37

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 22

-----VARIETY-----		STANDARD		TEST		1000		SIZING		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST		MIXO	
WT	#/BU	K.WT	G.	LG	%	SM	%	ASH	%	PRO	%	NESS	SEC	NO	EXTR	%	EXTR	%	SPK	%	ASH	%	COLOR	SCORE	
1986	N. D.	S	59.0	39.7	42	4	1.80	13.7	101	400	76.6	57.4	27	0.69	90	5									
621-1			65.8	54.9	85	1	1.43	11.5	110	400	77.3	60.2	33	0.56	70	3									
621-2			65.8	58.1	94	0	1.42	12.0	114	400	79.4	63.6	20	0.59	65	2									
621-4			65.0	52.1	80	1	1.49	11.4	107	400	76.4	58.5	43	0.60	90	4									
621-5			64.3	55.6	81	1	1.41	11.4	109	400	81.4	63.4	13	0.60	70	3									
621-6			64.5	62.5	95	0	1.65	12.8	112	400	77.1	59.4	20	0.64	70	4									
621-7			64.6	48.5	78	0	1.62	11.7	116	400	77.4	58.0	30	0.62	70	2									
621-8			64.8	49.8	85	0	1.68	13.7	110	400	73.5	49.1	17	0.64	85	5									
621-10			65.1	53.8	82	0	1.45	11.2	111	400	78.1	61.1	13	0.60	80	3									
621-11			65.4	54.1	84	0	1.49	11.6	110	400	78.0	60.3	7	0.57	80	2									
621-13			63.2	62.5	93	0	1.52	10.9	115	400	77.4	60.7	33	0.63	65	3									
621-15			65.3	52.9	87	0	1.46	11.7	117	400	77.2	59.8	7	0.57	75	3									
621-16			64.5	63.7	93	0	1.58	12.9	117	400	80.7	62.7	13	0.61	65	3									
621-17			66.1	50.8	82	0	1.61	12.3	114	400	74.3	56.9	33	0.59	85	3									
621-18			66.4	60.6	90	0	1.43	11.0	108	400	77.7	60.1	23	0.56	75	2									
621-20			64.4	56.2	88	0	1.49	12.1	115	400	79.4	60.9	13	0.55	60	2									
621-21			64.7	59.2	93	1	1.47	12.2	117	400	76.8	59.5	13	0.56	70	2									
621-24			65.2	52.6	88	0	1.58	12.0	123	400	78.6	61.6	63	0.63	75	4									
621-25			65.6	53.8	90	0	1.48	11.2	116	400	76.6	58.1	27	0.60	75	3									
621-26			64.6	47.4	82	0	1.68	12.8	109	400	75.9	56.0	30	0.61	80	2									
621-27			65.5	50.8	85	0	1.56	12.0	114	400	77.5	59.9	23	0.57	85	2									
621-28			64.1	51.3	77	1	1.59	12.7	109	400	77.0	59.2	33	0.63	75	3									
621-30			64.9	45.7	63	1	1.68	12.5	114	400	76.4	57.7	27	0.66	80	3									
621-31			65.5	49.3	75	1	1.62	12.0	116	400	77.1	59.0	30	0.68	80	3									
621-32			64.9	48.8	76	1	1.56	11.5	104	400	78.3	60.6	27	0.67	100	2									
621-33			65.2	46.5	70	1	1.60	12.1	108	400	78.1	59.4	43	0.69	85	3									
621-34			65.1	50.8	84	0	1.69	14.1	112	400	74.9	58.0	20	0.67	80	3									
621-35			65.0	57.1	89	0	1.48	11.7	114	400	77.8	61.1	27	0.61	85	3									
621-36			64.6	52.9	83	0	1.55	11.4	117	400	76.7	58.1	50	0.61	100	4									
621-37			65.1	56.2	88	0	1.51	11.9	120	400	78.2	60.9	17	0.62	90	2									
621-38			64.5	44.2	68	1	1.62	11.5	111	400	78.6	58.0	7	0.66	70	1									
621-40			65.3	49.5	80	0	1.56	12.3	114	400	76.0	54.8	23	0.62	105	3									



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 22 (Cont.)

-----VARIETY-----				SEM				VIS				COOK				FIRM-				SCORE				-----DEFICIENCIES-----															
STD				PRO				COL				WT				NESS				RES				***				TW KW SM WP TX SX DU SK SP VI FR											
				%								G.								G.																			
1986 N.D. STANDARD S																				4																			
621-1																				7.0	MJ																		
621-2																				7.6	MJ																		
621-3																				7.8	MI																		
621-4																				7.6	MJ	MJ																	
621-5																				7.8	MJ																		
621-6																				6.5	MJ																		
621-7																				7.1	MI																		
621-8																				5.7	MI MJ																		
621-9																				6.4	MJ																		
621-10																				7.3	MI																		
621-11																				6.8	MJ																		
621-12																				7.2	MJ																		
621-13																				7.0	MI																		
621-14																				5.9	MI																		
621-15																				5.72	MJ																		
621-16																				6.7	MJ																		
621-17																				6.6	MI																		
621-18																				5.9	MI																		
621-19																				6.6	MJ																		
621-20																				5.9	MI																		
621-21																				6.7	MI																		
621-22																				6.8	MJ	MJ																	
621-23																				6.4	MI																		
621-24																				6.1	MI																		
621-25																				6.0	MI																		
621-26																				5.9	MI																		
621-27																				6.0	MI																		
621-28																				6.4	MI																		
621-29																				6.0	MI																		
621-30																				6.4	MI																		
621-31																				6.24	MJ																		
621-32																				6.6	MI																		
621-33																				6.2	MI	MJ																	
621-34																				5.9	MI																		
621-35																				6.2	MI																		
621-36																				7.1	MJ	MJ																	
621-37																				6.4	MI																		
621-38																				7.1	MJ																		
621-39																				7.3	MI																		
621-40																				2	MI																		

DEFICIENCIES

AVG OF STANDARDS 59.0 39.7 4 13.7 76.6 57.4 90 27 13.1 9.5 5.62

MINOR FAULTING VALUES 56.8 37.6 9 12.5 74.1 54.4 80 37 11.5 8.5 4.12

MAJOR FAULTING VALUES 55.9 34.6 14 11.5 73.1 53.4 75 42 11.0 8.0 3.37

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE.

TABLE 23

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

-----VARIETY-----	STD	TEST	1000	SIZING	WHT	WHT	HARD- NESS	FALL SEC	TOTL %	SEMO EXTR %	SEMO SPK %	SEMO ASH %	DUST COLOR	NIXO SCORE
		#/BU	G.	LG %	SM %	ASH %	PRO %							
1986 N.D. STANDARD S	59.0	39.7	42	4	1.80	13.7	101	400	76.6	57.4	27	0.69	90	5
622-4	65.5	54.6	88	0	1.61	12.0	112	400	77.2	59.8	10	0.63	75	2
622-5	64.7	52.6	84	1	1.66	12.9	110	400	77.1	60.0	30	0.65	85	3
622-6	65.9	51.3	82	0	1.68	13.1	111	400	75.8	57.1	13	0.68	100	2
622-7	64.4	52.6	84	0	1.69	12.9	105	400	75.7	57.3	50	0.66	80	1
622-9	65.5	53.2	82	0	1.59	12.4	108	400	76.2	59.9	27	0.63	75	2
622-10	65.2	50.5	85	1	1.71	13.9	102	400	75.6	57.2	23	0.63	80	3
622-11	64.0	63.3	95	0	1.72	13.7	117	400	78.4	61.5	30	0.72	85	4
622-12	65.3	45.8	64	1	1.53	12.4	109	400	76.1	59.6	20	0.64	90	3
622-14	64.9	57.8	90	0	1.63	13.2	111	400	76.8	58.6	37	0.64	85	3
622-15	65.9	50.0	83	0	1.67	12.7	106	400	76.0	56.8	40	0.64	80	2
622-16	65.2	57.3	89	0	1.48	11.0	108	400	78.2	60.7	27	0.60	75	2
622-18	66.0	56.2	92	1	1.63	13.0	106	400	77.3	59.1	33	0.66	80	1
622-22	66.2	50.8	83	1	1.61	11.9	111	400	78.2	60.5	30	0.65	75	3
622-25	64.9	52.6	84	1	1.57	12.5	109	400	79.1	59.7	10	0.64	85	2
622-26	64.2	53.2	89	0	1.62	13.9	107	400	76.8	58.3	23	0.62	80	1
622-27	64.6	48.5	79	1	1.65	12.6	114	400	77.7	58.5	33	0.62	85	2
622-28	64.9	52.9	84	0	1.64	11.3	104	400	78.8	58.3	33	0.65	95	3
622-29	64.4	52.6	80	1	1.61	12.0	104	400	79.1	58.0	23	0.63	80	2
622-30	65.8	56.8	89	0	1.66	12.5	114	400	77.6	58.1	30	0.63	95	2
622-31	65.5	50.0	85	1	1.73	13.5	106	400	77.0	58.3	40	0.67	95	1
622-32	65.2	56.8	88	0	1.57	11.3	104	400	79.1	62.5	17	0.62	70	2
622-34	65.0	56.2	90	0	1.56	11.4	105	400	79.6	59.6	17	0.65	90	2
622-35	64.5	47.1	74	0	1.72	13.3	119	400	73.8	59.6	30	0.67	95	2
622-36	64.1	51.0	83	1	1.71	12.5	109	400	79.2	62.1	57	0.67	80	2
622-37	65.6	49.5	83	1	1.69	13.7	108	400	77.3	60.0	23	0.71	75	3
622-38	64.8	48.5	80	0	1.75	12.2	106	400	76.1	58.4	13	0.71	90	2
622-39	63.3	47.6	77	1	1.89	14.8	104	400	75.8	56.9	33	0.76	95	1
622-40	65.1	49.0	81	0	1.70	13.3	114	400	75.3	57.7	30	0.67	80	3

TABLE 23 (Cont.)

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

[illegible]

## DEFICIENCIES

DEVELOPED  
AVG OF STANDARDS

## MINOR FAULTING VA

## MAJOR FAULTING

**\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE**

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-CALIFORNIA STATION=DAVIS NURSEY=ADVANCED

TABLE 24

-----VARIETY-----	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	WHT ASH %	WHT PRO %	HARD-NESS	FALL NO SEC	TOTL EXTR %	SEMO EXTR %	SEMO SPK	SEMO ASH %	DUST COLOR	MIXO SCORE
1986 N.D. STANDARD S	59.0	39.7	42	4	1.80	13.7	101	400	76.6	57.4	27	0.69	90	5
623-1	65.3	52.4	85	0	1.72	12.9	104	400	77.0	57.6	37	0.67	80	1
623-2	64.7	51.5	79	0	1.71	13.2	108	400	75.2	58.4	43	0.65	85	1
623-3	64.7	46.5	81	0	1.65	13.0	103	400	75.7	57.6	20	0.68	85	1
623-4	66.2	51.5	84	0	1.72	11.7	113	400	76.5	61.9	17	0.67	85	1
623-5	65.1	47.1	69	2	1.60	12.3	106	400	75.5	57.2	27	0.63	100	1
623-6	65.1	51.0	88	0	1.66	12.3	102	400	76.2	59.1	23	0.65	90	2
623-7	65.0	48.3	78	0	1.61	12.7	110	400	76.8	59.5	20	0.65	90	2
623-8	65.3	48.8	84	0	1.77	12.0	103	400	76.4	58.1	33	0.75	85	1
623-9	64.9	48.8	80	1	1.68	12.1	111	400	77.6	52.5	40	0.69	80	1
623-10	64.3	50.3	89	0	1.84	14.4	105	400	73.3	54.2	50	0.72	90	1
623-11	65.0	55.6	87	0	1.69	12.2	111	400	78.3	61.4	60	0.69	70	2
623-12	63.4	49.3	73	1	1.48	11.3	105	400	78.2	59.7	13	0.63	85	2
623-15	65.7	47.8	80	0	1.66	12.6	101	400	76.6	57.4	23	0.66	80	3
623-16	65.6	57.3	83	0	1.47	10.7	103	400	77.3	60.1	20	0.58	75	2
623-21	63.6	48.8	78	1	1.69	12.8	114	400	77.7	59.8	20	0.70	80	4
623-24	65.3	51.5	82	1	1.69	11.6	108	400	78.5	60.5	30	0.69	85	4
623-26	64.2	46.7	75	0	1.74	11.5	104	400	76.4	56.1	23	0.68	95	1
623-27	64.4	49.3	86	0	1.71	12.7	105	400	77.6	58.2	20	0.68	70	2
623-28	65.3	52.6	82	0	1.66	13.2	110	400	77.4	58.7	20	0.64	80	3
623-29	65.3	51.3	82	0	1.57	12.0	113	400	80.3	62.0	13	0.69	75	4
623-31	63.7	38.0	91	0	1.70	11.0	100	400	75.4	59.3	30	0.69	75	3
623-34	65.6	56.2	90	0	1.60	12.2	114	400	76.6	58.6	13	0.60	85	3
623-35	65.2	45.7	74	0	1.65	12.1	110	400	77.7	57.7	20	0.63	85	2
623-36	65.3	52.1	74	1	1.65	11.9	117	400	76.9	60.1	40	0.67	75	3
623-37	66.2	52.6	80	0	1.61	12.1	112	400	77.5	59.5	27	0.65	90	2
623-38	63.3	54.3	83	0	1.76	13.2	109	400	76.4	56.1	27	0.69	75	2
623-40	63.6	55.6	89	0	1.73	12.4	103	400	76.7	58.5	23	0.69	85	2

QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 24 (Cont.)

-----VARIETY-----				STD	SEMO	VIS	COOK	FIRM-	SCORE	-----DEFICIENCIES-----											
					PRO	COL	WT	NESS	RES	***	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
					%		G.		G.												
1986 N.D.	STANDARD S	13.1	9.5	28.7	5.62	7.0	4														
623-1		11.9	10.0	31.4	5.03	6.6	2								MI	MI					
623-2		11.9	10.0	31.0	5.40	6.5	3									MJ					
623-3		11.9	10.0	31.6	5.38	5.9	4														
623-4		10.6	10.0	31.8	4.67	6.8	1							MI					MJ		
623-5		11.2	10.0	31.5	5.14	6.6	2							MI					MI		
623-6		11.1	10.0	30.4	6.07	6.1	2							MI					MI		
623-7		11.3	10.0	31.7	5.10	6.3	3							MI					MI		
623-8		10.9	10.0	31.4	5.27	6.4	1							MI					MJ		
623-9		11.0					1							MI	MI				MJ		
623-10		12.6	10.0	31.3	4.13	6.9	1							MI	MI				MJ		
623-11		11.3	9.5	30.9	5.12	6.7	1							MI		MJ	MJ		MI		
623-12		10.4	10.0	32.1	5.21	6.9	1							MJ					MJ		
623-15		11.2	10.0	30.2	5.75	6.7	1								MI				MI		
623-16		10.1	9.5	30.8	5.03	6.7	1							MJ					MJ		
623-21		11.6	10.0	30.7	5.53	6.1	2								MI				MI		
623-24		10.4	10.0	31.0	5.40	6.8	1							MI					MJ		
623-26		10.4	10.0	31.5	4.92	6.4	1							MJ					MJ		
623-27		11.7	8.5	31.1	5.70	6.3	1											MJ		MI	
623-28		11.7	10.0	32.1	5.79	6.7	2								MI				MI		
623-29		11.1	9.5	30.5	5.44	6.4	1														
623-31		10.4	10.0	31.4	4.88	6.2	1							MI					MJ		
623-34		11.0	10.0	30.8	5.70	5.7	1							MJ					MJ		
623-35		11.0	10.0	30.6	5.72	6.1	1							MI					MI		
623-36		11.2	10.0	31.3	5.46	6.2	1							MI					MJ	MI	
623-37		11.0	10.0	31.4	5.38	6.5	1							MI					MI		
623-38		12.3	10.0	30.4	5.92	6.6	1												MJ		
623-40		11.4	10.0	31.3	5.18	6.1	2							MI					MI		

DEFICIENCIES

AVG OF STANDARDS	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
MINOR FAULTING VALUES	59.0	39.7	4	13.7	76.6	57.4	90	27	13.1	9.5	5.62
MAJOR FAULTING VALUES	56.8	37.6	9	12.5	74.1	54.4	80	37	11.5	8.5	4.12
	55.9	34.6	14	11.5	73.1	53.4	75	42	11.0	8.0	3.37

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE-CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

TABLE 25

-----VARIETY-----	STD	TEST		1000		SIZING		WHT		WHT		HARD-		FALL		TOTL		SEMO		SEMO		DUST	MIXO
		WT	#/BU	K. WT	G.	LG	%	SM	%	ASH	PRO	%	NESS	NO	SEC	EXTR	%	EXTR	%	SPK	ASH		
1986 N.D. STANDARD S		59.0		39.7		42		2	1.80	13.7	101	400	76.6	57.4	27	0.69	90	5					
BOYEROS 'S'		64.0		57.3		86		1	1.50	12.0	117	400	77.5	60.9	33	0.63	70	3					
CARCUMUN 'S'		64.7		57.8		81		1	1.51	11.5	108	400	78.8	61.1	23	0.60	55	3					
CHEN 'S'		65.1		59.5		91		0	1.52	13.3	106	400	76.6	59.4	47	0.58	75	3					
HORA		64.0		54.9		85		0	1.75	12.9	107	400	78.4	59.8	37	0.66	65	3					
HYBRID #77018		64.0		42.4		64		1	1.78	12.6	112	400	77.1	59.4	23	0.66	95	3					
YAVAROS		65.7		58.8		90		0	1.44	11.7	111	400	76.9	60.0	13	0.57	70	2					
624-1		64.8		54.3		83		0	1.55	12.0	107	400	77.5	60.0	30	0.64	90	2					
624-6		62.7		57.8		89		0	1.55	12.1	103	400	77.8	61.7	37	0.63	80	4					
624-21		65.4		60.6		90		0	1.48	11.7	106	400	77.6	61.7	10	0.66	60	3					
624-22		64.4		57.8		88		0	1.60	12.0	108	400	77.9	62.0	47	0.60	75	2					
624-23		63.9		59.2		91		1	1.58	12.5	111	400	77.6	59.5	27	0.64	75	3					
624-25		64.2		55.2		89		1	1.54	11.7	112	400	77.8	62.0	60	0.63	70	3					
624-28		64.6		55.9		88		0	1.53	12.4	118	400	78.9	62.0	43	0.62	80	4					
624-30		63.0		61.7		92		0	1.50	13.2	116	400	80.0	61.2	27	0.65	85	4					
624-31		65.8		53.5		88		0	1.50	11.9	112	400	74.9	58.5	17	0.62	70	4					
624-32		65.7		57.3		88		0	1.52	12.1	110	400	77.3	60.3	13	0.66	60	4					



QUALITY DATA OF DURUM SAMPLES 1986 CROP  
STATE=CALIFORNIA STATION=DAVIS NURSERY=ADVANCED

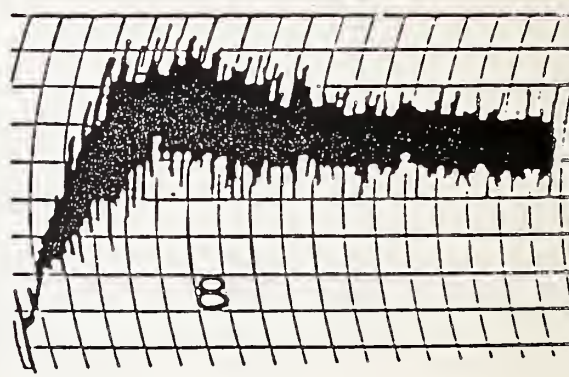
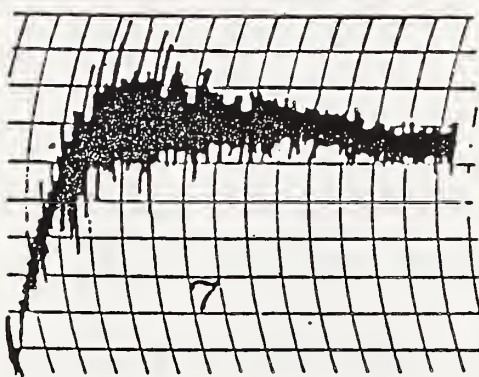
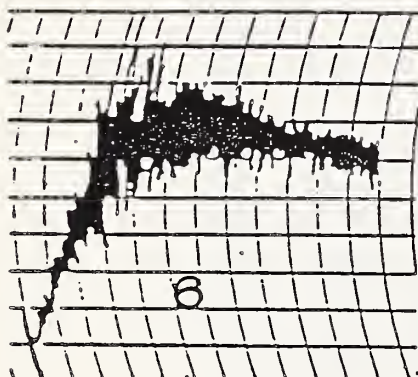
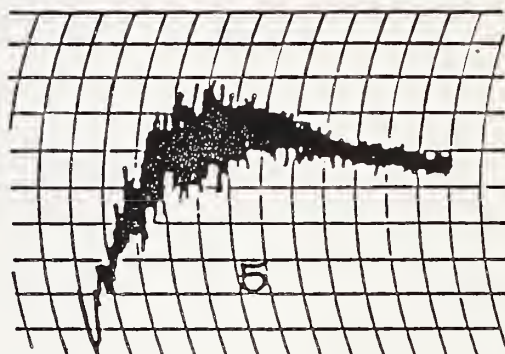
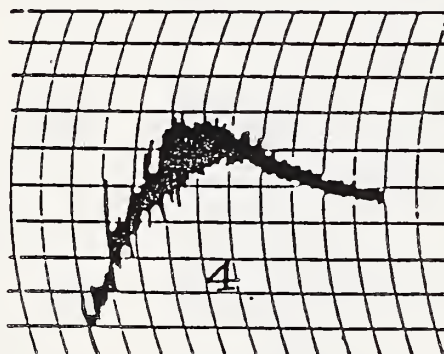
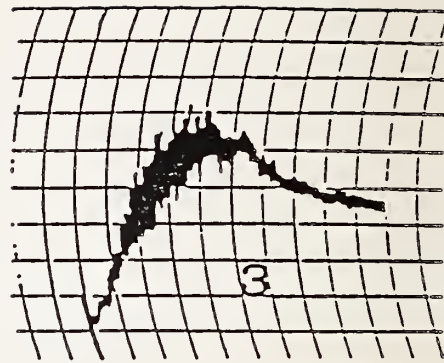
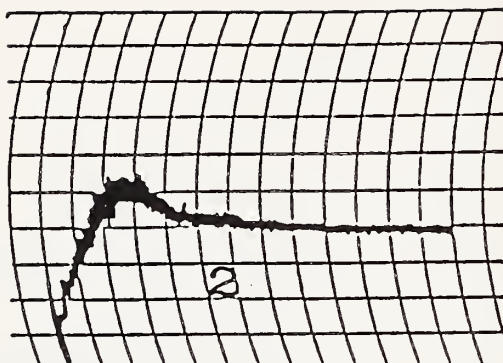
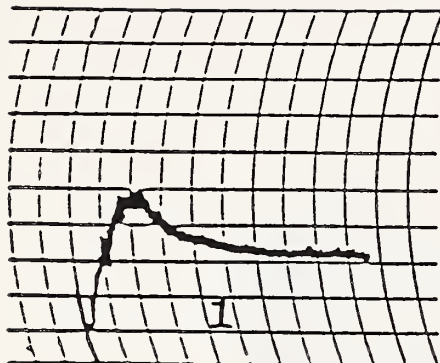
TABLE 25 (Cont.)

VARIETY	STD	SEMO PRO %	VIS COL	COOK WT G.	FIRM- NESS G.	RES G.	SCORE ***	DEFICIENCIES									
								TW	KW	SM	WP	TX	SX	DU	SK	SP	VI FR
1986 N.D. STANDARD S		13.1	9.5	28.7	5.62	7.0	4										
BOYEROS 'S'		11.1	9.0	30.8	5.25	6.5	1				MI						
CARCUMUN 'S'		10.6	9.5	31.8	5.79	6.8	1				MJ						
CHEN 'S'		11.9	9.5	30.3	5.98	6.3	1										
HORA		12.1	9.5	30.3	6.09	7.0	1										
HYBRID #77018		11.0	10.0	30.3	5.79	6.6	2										
YAVAROS		10.8	10.0	30.6	5.53	7.8	1				MI						
624-1		11.1	10.0	31.0	4.73	6.4	2										
624-6		11.0	9.5	31.0	5.23	6.8	1				MI						
624-21		10.6	9.5	31.0	5.72	7.2	1				MI						
624-22		10.9	9.0	31.5	5.14	6.4	1				MI						
624-23		11.4	9.5	31.2	6.29	6.7	1				MI						
624-25		10.9	9.5	31.1	6.11	6.8	1				MI						
624-28		11.5	10.0	31.3	5.77	6.6	1				MI						
624-30		12.1	10.0	30.7	7.08	6.7	4				MI						
624-31		10.9	9.5	31.2	6.39	6.5	1				MI						
624-32		11.2	10.0	30.9	6.05	7.2	1				MI						

DEFICIENCIES

	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR
AVG OF STANDARDS	59.0	39.7	2	13.7	76.6	57.4	90	27	13.1	9.5	5.62
MINOR FAULTING VALUES	56.8	37.6	7	12.5	74.1	54.4	80	37	11.5	8.5	4.12
MAJOR FAULTING VALUES	55.9	34.6	12	11.5	73.1	53.4	75	42	11.0	8.0	3.37

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE



REFERENCE MIXOGRAMS  
DURUM WHEAT



